Docket:	:	A.09-07-001
Exhibit Number	:	
Commissioner	:	John Bohn
Admin. Law Judge	:	Jeffrey O' Donnell
DRA Project Mgr.	:	Patrick Hoglund

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

REPORT ON THE RESULTS OF OPERATIONS IN STOCKTON DISTRICT OF CALIFORNIA WATER SERVICE COMPANY

Test Year 2011 and
Escalation Years 2012 and 2013
Application 09-07-001

For authority to increase water rates located in its
Stockton District serving City of Stockton
and unincorporated areas of San Joaquin County.

San Francisco, California
February 17, 2010

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MEMORANDUM

The Division of Ratepayer Advocates ("DRA") of the California Public Utilities Commission ("Commission") prepared this Report in California Water Service Company's ("CWS") rate case proceeding A.09-07-001. In this docket, the Applicant requests an order for authorization to increase rates charged for water service by $6,797,900 or 22.8 % in Test year 2011; by $1,845,400 or 5.1% in Escalation year 2012; and by $1,845,400 or 4.9% in Escalation year 2013 in its Stockton District service area. The applicant requests adoption of a rate of return of 8.58% from D. 09-05-019. DRA presents its analysis and recommendations associated with the Applicant's request in this Report.

Patrick Hoglund serves as DRA's project coordinator in this review, and is responsible for the overall coordination in the preparation of this report. Appendix A contains witnesses' prepared qualifications and testimony.

DRA's reports on payroll, conservation expenses and special requests are included under separate Reports.

DRA's Legal Counsels for this case are Selina Shek, Allison Brown, and Hien Vo.

EXECUTIVE SUMMARY

CWS requests increasing rates by 22.8% in Test Year 2011 and 5.1% in Escalation Year 2012, whereas DRA recommends an increase of 2.4% in Test Year 2011 and inflationary increases for the Escalation Years

Key Recommendations

DRA recommends that CWS' requested rate of return of 8.58% be adopted in this proceeding.

DRA's recommendations are based on higher total sales (Chapter 2), lower estimates of Operation and Maintenance expenses (Chapter 3), lower estimates of Administrative and General expenses (Chapter 4), lower Plant additions (Chapter 7) and lower Ratebase (Chapter 9).

DRA addresses its recommended treatment of CWS' 30 Special Requests ("SR") in a separate report. That report discusses Special Request #19 regarding rate base offset pilot approval for Stockton District.

List of DRA Witnesses and Respective Chapters

Chapter Number	Description	Witness
-	Executive Summary	
1	Overview and Policy Introduction and Summary of Earnings	Patrick Hoglund
2	Water Consumption and Operating Revenues	Lisa Bilir Zachary Burt
3	Operations and Maintenance (except Payroll) Expenses	Raymond Yin
4	Administrative & General (except Payroll & Conservation) Expenses	Cleason Willis Jose Cabrera
5	Taxes Other Than Income	Jerry Oh
6	Income Taxes	Jerry Oh
7	Utility Plant in Service	Isaiah Larsen
8	Depreciation Reserve and Depreciation Expense	Isaiah Larsen
9	Ratebase N/G multiplier	Isaiah Larsen Richard Rauschmeier
10	Customer Service	Toni Canova
11	Rate Design	Lisa Bilir
12	Water Quality	Pat Ma
13	Step Rate Increase	Patrick Hoglund

CHAPTER 1: OVERVIEW AND POLICY

A. INTRODUCTION

This Report sets forth DRA's analysis and recommendations for A. 09-07-001, CWS' general rate increase request for Test Year 2011 and Escalation Years 2012 and 2013.

B. SUMMARY OF RECOMMENDATIONS

Tables 1-1 through 1-3 of the Summary of Earnings compare the results of operations for Test Year 2011 including revenues, expenses, taxes and ratebase.

C. DISCUSSION

CWS requests the total revenues as follows:

Year	Amount of Increase	Percent
2011	$6,797,900	22.8%
2012	$1,845,400	5.1%
2013	$1,845,400	4.9%

CWS estimates that its proposed rates in the Application will produce revenues providing the following returns:

Year	Return on Rate Base	Return on Equity
2011	8.58%	10.2%
2012	8.58%	10.2%
2013	8.58%	10.2%

D. CONCLUSION

DRA recommends a revenue increase for the Test Year as follows (Escalation Years 2012 and 2013 are covered in Chapter 13):

Year	Amount of Increase	Percent
2011	$750,200	2.4%

D.08-07-008 authorized the last general rate increase for CWS in A. 07-07-001, resulting in a rate of return on rate base of 8.66% in 2008-2009. Present Rates in this report are based on Advice Letter No.1929, which became effective July 1, 2009, as authorized by D. 08-07-008.

A comparison of DRA's and CWS' estimates for rate of return on rate base for the Test Year 2011 at present and the utility's proposed rates is shown below:

RATE OF RETURN

	DRA	CWS	Diff
Present Rates	7.81%	2.80%	-5.01%
Proposed Rates	15.25%	8.58%	-6.67%

TABLE 1-1

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	29,886.8	29,818.0	(68.8)	-0.2%
Operating expenses:				
Operation & Maintenance	12,839.5	14,726.1	1,886.6	14.7%
Administrative & General	3,101.1	3,437.3	336.2	10.8%
G. O. Prorated Expense	3,982.3	5,366.9	1,384.6	34.8%
Dep'n & Amortization	2,816.8	3,154.9	338.1	12.0%
Taxes other than income	1,048.0	1,258.3	210.3	20.1%
State Corp. Franchise Tax	335.9	(92.8)	(428.7)	-127.6%
Federal Income Tax	1,549.0	12.6	(1,536.5)	-99.2%
Total operating exp.	25,672.6	27,863.3	2,190.7	8.5%
Net operating revenue	4,214.2	1,954.7	(2,259.5)	-53.6%
Rate base	53,975.1	69,811.0	15,835.9	29.3%
1 Return on rate base	7.81%	2.80%	-5.01%	-64.1%

TABLE 1-2

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(AT UTILITY PROPOSED RATES)

Item	DRA Estimate	CWS Estimate	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	36,683.9	36,615.5	(68.4)	-0.2%
Operating expenses:				
Operation & Maintenance	12,926.1	14,812.8	1,886.6	14.6%
Administrative & General	3,101.1	3,437.3	336.2	10.8%
G. O. Prorated Expense	3,982.3	5,366.9	1,384.6	34.8%
Dep'n & Amortization	2,816.8	3,154.9	338.1	12.0%
Taxes other than income	1,081.7	1,292.4	210.7	19.5%
State Corp. Franchise Tax	926.1	497.4	(428.7)	-46.3%
Federal Income Tax	3,618.0	2,064.0	(1,553.9)	-42.9%
Total operating exp.	28,452.1	30,625.7	2,173.7	7.6%
Net operating revenue	8,231.8	5,989.8	(2,242.1)	-27.2%
Rate base	53,975.1	69,811.0	15,835.9	29.3%
1 Return on rate base	15.25%	8.58%	-6.67%	-43.7%

TABLE 1-3

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

SUMMARY OF EARNINGS

TEST YEAR 2011

(DRA ESTIMATES)

Item	DRA Est. @ Present Rates	@ Rates Proposed by DRA	Proposed Exceeds Present Amount	%
	(Thousands of $)			
Operating revenues	29,886.8	30,592.0	705.2	2.4%
Operating expenses:				
Operation & Maintenance	12,839.5	12,848.5	9.0	0.1%
Administrative & General	3,101.1	3,104.5	3.4	0.1%
G. O. Prorated Expense	3,982.3	3,982.3	0.0	0.0%
Dep'n & Amortization	2,816.8	2,816.8	0.0	0.0%
Taxes other than income	1,048.0	1,048.0	0.0	0.0%
State Corp. Franchise Tax	335.9	397.1	61.2	18.2%
Federal Income Tax	1,549.0	1,763.7	214.7	13.9%
Total operating exp.	25,672.6	25,960.9	288.3	1.1%
Net operating revenue	4,214.2	4,631.2	417.0	9.9%
Rate base	53,975.1	53,975.1	0.0	0.0%
1 Return on rate base	7.81%	8.58%	0.77%	9.9%

CHAPTER 2: WATER CONSUMPTION AND OPERATING REVENUES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations regarding forecasted number of customers, water sales and operating revenues for CWS' Stockton district. Stockton had an average of 41,863 service connections in 2008; the Stockton district includes the City of Stockton and vicinity, in San Joaquin County. DRA reviewed CWS' data responses, testimony, application, and workpapers before formulating its own estimates.

B. SUMMARY OF RECOMMENDATIONS

DRA adhered to the methods outlined in the Rate Case Plan ("RCP") in DRA's analysis of sales forecast and revenues. Whereas, CWS' sales forecast method differed from the RCP. Appendix A to Chapter 2 for DRA's Bakersfield report provides a detailed explanation of DRA's sales forecast and revenue methods. The Commission should uphold the methods outlined in the RCP by adopting DRA's recommendations presented in this report.

1) Average Active Service Connections

CWS proposes to forecast the number of customers using the four-year (2004-2007) average change in customers by customer class for the Residential, Business and Multifamily customer classes. CWS proposes to use the four-year average due to customer reclassifications occurring in 2008 in preparation for the implementation of the WRAM. CWS proposes to forecast the number of customers using the five-year (2004-2008) average change in customers by customer class for the Industrial, Public Authority and Other customer classes. DRA proposes that the four-year (2004-2007) average for all customer classes.

2) Metered Sales and Supply

The Commission should require CWS to use the method proposed by DRA for residential and business customers, in accordance with the RCP, going forward, and should also adopt DRA's estimates for metered sales and supply in this case. Table 2-1 at the end of this chapter illustrates DRA and CWS' proposed sales per average customer for each customer class. DRA uses the same general methodology as CWS to estimate multiple regression equations in accordance with the RCP and the "New Committee Method" ("NCM"). As is outlined in the NCM, rain, temperature and time are included in the regression model, where possible. The primary difference between DRA and CWS' forecasts are that CWS used the regression equations to calculate weather-adjusted recorded sales from 2008 and used this as its estimated sales for 2011. DRA used the regression equations to calculate forecasted sales for 2011 and 2012, based on the 30-year monthly average rain and temperature, in accordance with the RCP.[1]

3) Operating Revenues

The Commission should adopt DRA's estimates for operating revenues. DRA uses the same method as CWS to calculate operating revenues, although DRA presents the operating revenues differently for illustrative purposes (see Appendix A to Chapter 2 for DRA's Bakersfield report in section B. 1. and B. 2. for the complete explanation).

4) Unaccounted for Water

CWS estimates 5.89% unaccounted for water in Stockton based on the five-year average recorded unaccounted for water. DRA agrees.

C. DISCUSSION

1) Average Active Service Connections

[1] D.07-05-062, Appendix A – Rate Case Plan and Minimum Data Requirements for Class A Water Utilities General Rate Applications, p. A-23, footnote 4, (B) "Use 30-year average for forecast values for temperature and rain"

Customer growth is the forecasted growth of a customer base in a given area. CWS and DRA use customer growth to project revenues for 2011-2012. The RCP, adopted in D.07-05-062 requires number of customers to be forecast using a five-year average of the change in the number of customers by customer class, unless an unusual event occurs, in which case an adjustment to the five-year average may be made.[2] Table 2-2 and 2-3 at the end of this chapter summarize DRA and CWS' proposed average number of customers for each customer class in 2011 and 2012, respectively.

a. Residential, Business, Multifamily, Public Authority, Industrial, and Other

CWS proposes using the five-year average change in the number of customers by customer class for the Public Authority, Industrial and Other customer classes. For Residential, Business and Multifamily customer classes, CWS proposes to forecast number of customers using the four-year (2004-2007) average of the change in the number of customers by customer class due to the large number of customer reclassifications during 2008, making it an anomalous year. DRA proposes to forecast number of customers using the four-year (2004-2007) average of the change in the number of customers by customer class for all customer classes since the reclassification likely affected the Public Authority, Industrial and Other customer classes as well.

[2] D.07-05-062, Appendix A: RCP, p. A-23, footnote 4.

2) Metered Sales and Supply

Table 2-4 and 2-5 at the end of this chapter summarize DRA and CWS' proposed metered and flat rate sales in Stockton for each customer class in 2011 and 2012, respectively.[3] DRA removed CWS' 1.5% conservation adjustment to consumption in 2012 and the reasons are described in Appendix A to the Bakersfield report, section A. 4.

CWS noted that the forecasting models presented by CWS had a strange dip in predicted sales for July of 2001. Upon inspection of the original data, DRA found that July 2001 temperature was blank; since the data used to create the forecasting model was time-lagged this led to unusually low temperature data in July and August of 2001 for the data set used by CWS in estimating its models. To correct this, DRA inserted the average of June and August 2001 as the temperature for July 2001 in the original data set, thus changing the time-lagged temperature data used for both July and August as compared to those used by CWS when estimating the statistical models presented below.

a. Residential

CWS proposed using the unconstrained model, with 4 monthly temperature variables dropped and an autoregressive term added. Despite the correction in the July and August temperature data sets, DRA found that the unconstrained model continued to yield poor confidence levels and some negative coefficients for the monthly temperature variables. DRA found a poor confidence level for the time variable in the constrained model, so that variable was dropped. DRA found good confidence levels for the coefficients in the modified constrained model (including temperature and rain but not time). Although the modified constrained model had

[3] If DRA's sales forecast combined with DRA's other recommendations leads to higher bill increases than CWS presented in its notices to customers, DRA recommends that the total bill increases should be capped at CWS' proposed levels.

an R-squared of 0.77, in accordance with the RCP, DRA accepts the constrained model since the coefficient had the correct sign (negative) and the statistical confidence was still high.[4] DRA also noted that in this case the five-year average and the modified constrained model yielded similar forecasts: the former 194.0 ccf[5]/service, the latter 195.4 ccf/service. In addition to using a different model, DRA also used the regression model to forecast sales, while CWS used its regression model to weather-normalize 2008 recorded sales. Workpaper Revenue-001 shows the regression model that DRA and CWS chose. The following table summarizes DRA and CWS' recommendations:

Table 2-a: forecasted sales (ccf/service)

	CWS	DRA	% difference
2011	192.5	195.4	1.5%
2012	189.6	195.4	3.1%

b. Business

CWS proposed using the unconstrained model, with 3 monthly temperature variables dropped as well as time dropped and an autoregressive term added. Despite the correction in the July and August temperature data sets, DRA found that the unconstrained model continued to yield poor confidence levels and some negative coefficients for the monthly temperature variables. DRA found a poor confidence level for the time variable in the constrained model, so that variable was dropped. DRA found good confidence levels for the coefficients in the modified constrained model (including temperature and rain but not time). Although the modified constrained model had an R-squared of 0.78, in accordance

[4] Although 0.77 does not quite meet DRA's criteria outlined in the Appendix to Chapter 2 to the Bakersfield Report, DRA prioritized the use of a regression model in compliance with the Rate Case Plan p. A-26, footnote 8, which states that the utility and DRA shall use the "New Committee Method" to forecast per customer usage for the residential and small commercial customer classes.

[5] 100 cubic feet

with the RCP, DRA accepts the constrained model since the coefficient had the correct sign (negative) and the statistical confidence was still high

DRA also noted that in this case the five-year average and the modified constrained model yielded similar forecasts: the former 675.3 ccf/service, the latter 663.7 ccf/service. In addition to using a different model, DRA also used its regression model to forecast sales, while CWS used its regression model to weather-normalize 2008 recorded sales. Workpaper Revenue-001 shows DRA's regression model. Table 2-b below summarizes DRA and CWS' recommendations for sales per service for business customers:

Table 2-b: forecasted sales (ccf/service)

	CWS	DRA	% difference
2011	696.4	663.7	-4.7%
2012	686.0	663.7	-3.2%

c. Multifamily

Multifamily customers accounted for 6.66%[6] of metered sales for the Stockton district in 2008. CWS proposed using the unconstrained model, with 2 monthly temperature variables dropped. Despite the correction in the July and August temperature data sets, DRA found that the unconstrained model continued to yield poor confidence levels and some negative coefficients for the monthly temperature variables. DRA found good confidence levels for the coefficients in the constrained model (including temperature, rain and time), but the constrained model had an r-squared of 0.64, therefore DRA proposes using the five-year average instead. Workpaper Revenue-001 shows DRA's regression model. Table 2-c below summarizes DRA and CWS' recommendations for sales per service for Multifamily customers:

[6] Calculated from CWS' Table 4-C

Table 2-c: forecasted sales (ccf/service)

	CWS	DRA	% difference
2011	2,609.7	2,797.7	7.2%
2012	2,570.6	2,797.7	8.8%

d. Industrial

For the Industrial customer class, CWS recommends the use of the unconstrained regression model, with five of the temperature variables dropped and an autoregressive term added. DRA recommends the use of the five-year average of sales because of the poor statistics calculated in the unconstrained and constrained models. Table 2-d below summarizes DRA and CWS' recommendations for sales per service for Industrial customers:

Table 2-d: forecasted sales (Kccf / Industrial customer class)[7]

	CWS	DRA	% difference
2011	1,292.9	1,306.6	1.1%
2012	1,273.5	1,306.6	2.6%

e. Public Authority

Public Authority customers in the Stockton district accounted for 9.82% of metered sales in 2008. For the Public Authority customer class, CWS recommends the use of the unconstrained regression model, with four of the temperature variables dropped. DRA recommends the use of the five-year average of sales because of the poor statistics calculated in the unconstrained and constrained models. Table 2-e below compares DRA and CWS' forecasted sales for the Public Authority customer class.

[7] The numbers in Table 2-d differ from the numbers in Table 2-1 because Table 2-d illustrates sales for the entire customer class, while Table 2-1 illustrates sales per average customer within each customer class. DRA and CWS forecasted sales for Industrial, Public Authority, and Other customer classes for the entire customer class, rather than for an average customer.

Table 2-e: forecasted sales (Kccf)[8]

	CWS	DRA	% difference
2011	1,199.4	1,182.4	-1.4%
2012	1,181.4	1,182.4	0.1%

f. Other

DRA agrees with CWS' proposed method to use the five-year average sales for the Other customer class.

3) Operating Revenue

Tables 2-6 and 2-7 at the end of this chapter summarize DRA and CWS' forecasted operating revenue at present rates in 2011, at CWS proposed rates in 2011 and at present rates in 2012, respectively.

a. Residential

CWS calculates operating revenue for metered residential customers by (1) taking the sum of estimated quantity revenues calculated for each meter size, for each month and for each tier of the increasing block rate design based on three-year average sales patterns and (2) adding this to the estimated service charge revenues, calculated by taking average number of customers each year and multiplying it by the service charge. CWS' method is outlined in detail in Appendix A of Chapter 2 in DRA's Bakersfield Report. DRA does not recommend any changes to this method.

[8] The numbers in Table 2-e differ from the numbers in Table 2-1 because Table 2-e illustrates sales for the entire customer class, while Table 2-1 illustrates sales per average customer within each customer class. DRA and CWS forecasted sales for Industrial, Public Authority, and Other customer classes for the entire customer class, rather than for an average customer.

b. Business, Multifamily, Public Authority, Industrial and Other

CWS calculates operating revenues for Business, Multifamily, Public Authority, Industrial, and Other customers by (1) taking the sum of estimated quantity revenues for each meter size, for each month based on three-year average sales patterns and (2) adding the quantity revenues to the estimated service charge revenues, calculated by multiplying the forecasted average number of customers by the meter charges. CWS's method is outlined in detail in Appendix A to Chapter 2 of DRA's Bakersfield Report. DRA does not recommend any changes to this method.

4) Unaccounted for Water

CWS estimates 5.89% unaccounted for water in Stockton based on a five-year average of the percentage of unaccounted for water from 2004-08. DRA accepts the proposed unaccounted for water estimate.

D. CONCLUSION

1) Average Active Service Connections

The Commission should adopt DRA's recommended number of service connections.

2) Metered Sales and Supply

DRA recommends adherence to the RCP and NCM for forecasting metered sales and supply and recommends that the Commission adopt DRA's forecasted sales estimates and require CWS to use the method proposed by DRA for residential and business customers going forward.

3) Operating Revenues

DRA accepts CWS' method for calculating operating revenues, with the following modifications for illustrative purposes: for all customer classes, DRA used the present rates given by CWS at the time it filed the GRC application to illustrate Operating Revenues at Present Rates for 2011 and 2012. Also, DRA

used the proposed rates from CWS' GRC application filed in July 2009 to calculate Operating Revenues at Proposed Rates. Appendix A to Chapter 2 for DRA's Bakersfield report in section B. 1. and B. 2. provides a detailed explanation.

4) Unaccounted for Water

CWS estimates 5.89% unaccounted for water in Stockton and DRA agrees.

TABLE 2-1

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT
WATER SALES PER AVERAGE CUSTOMER

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(CCF/CONN./YR)			
Residential	195.4	192.5	(2.9)	-1.5%
Business	663.7	696.4	32.7	4.7%
Multiple Family	2,797.7	2,609.7	(188.0)	-6.7%
Industrial	16,751.3	16,575.5	(175.8)	0.0%
Public Authority	3,683.5	3,591.1	(92.4)	-2.5%
Other	821.1	1,114.9	293.8	35.8%
Irrigation	0.0	0.0	0.0	0.0%
Res. Flat Rate	0.0	0.0	0.0	0.0%

TABLE 2-2

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

AVERAGE NUMBER OF CUSTOMERS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
Metered Connections				
Residential	36,172	36,172	0	0.0%
Business	3,854	3,854	0	0.0%
Multiple Family	360	360	0	0.0%
Industrial	78	78	0	0.0%
Public Authority	321	334	13	4.0%
Other	38	28	(10)	-26.3%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	40,823	40,826	3	0.0%
Flat Rate Connections				
Residential Flat	0	0	0	0.0%
Private Fire Protection	745	745	0	0.0%
Public Fire Protection	48	48	0	0.0%
Total flat rate connections	793	793	0	0.0%
Total Active Connections				
Include Fire Protection	41,616	41,619	3	0.0%
Exclude Fire Protection	40,823	40,826	3	0.0%

TABLE 2-3

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

AVERAGE NUMBER OF CUSTOMERS

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
Metered Connections				
Residential	36,229	36,229	0	0.0%
Business	3,837	3,837	0	0.0%
Multiple Family	357	357	0	0.0%
Industrial	76	76	0	0.0%
Public Authority	319	337	18	5.6%
Other	41	27	(14)	-34.1%
Irrigation	0	0	0	0.0%
Reclaimed	0	0	0	0.0%
Total metered connections	40,859	40,863	4	0.0%
Flat Rate Connections				
Residential Flat	0	0	0	0.0%
Private Fire Protection	761	761	0	0.0%
Public Fire Protection	51	51	0	0.0%
Total flat rate connections	812	812	0	0.0%
Total Active Connections				
Include Fire Protection	41,671	41,675	4	0.0%
Exclude Fire Protection	40,859	40,863	4	0.0%

TABLE 2-4

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

TOTAL SALES AND SUPPLY

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(KCCF/YEAR)			
Metered Sales				
Residential	7,067.8	6,963.1	(104.7)	-1.5%
Business	2,558.0	2,683.9	125.9	4.9%
Multiple Family	1,007.2	939.5	(67.7)	-6.7%
Industrial	1,306.6	1,292.9	(13.7)	-1.0%
Public Authority	1,182.4	1,199.4	17.0	1.4%
Other	31.2	31.2	0.0	0.1%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	13,153.1	13,110.1	(43.1)	-0.3%
Flat Rate Sales				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 5.89%	823.2	820.5	(2.7)	-0.3%
Total delivered	13,976.3	13,930.6	(45.8)	-0.3%
Supply				
Company Wells	4,436.7	4,390.9	(45.8)	-1.0%
Purchases - SEWD	9,539.7	9,539.7	0.0	0.0%
Total production	13,976.4	13,930.6	(45.8)	-0.3%

TABLE 2-5

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

TOTAL SALES AND SUPPLY

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(KCCF/YEAR)			
Metered Sales				
Residential	7,078.9	6,869.5	-209.4	-3.0%
Business	2,546.7	2,632.1	85.4	3.4%
Multiple Family	998.8	917.7	-81.1	-8.1%
Industrial	1,306.6	1,273.5	-33.1	-2.5%
Public Authority	1,182.4	1,181.4	-1.0	-0.1%
Other	31.2	30.7	-0.5	-1.4%
Irrigation	0.0	0.0	0.0	0.0%
Reclaimed	0.0	0.0	0.0	0.0%
Total metered sales	13,144.6	12,904.8	(239.8)	-1.8%
Flat Rate Sales				
Residential	0.0	0.0	0.0	0.0%
Unaccounted For Water 5.89%	822.7	807.7	(15.0)	-1.8%
Total delivered	13,967.3	13,712.5	(254.8)	-1.8%
Supply				
Company Wells	4,427.6	4,172.8	(254.8)	-5.8%
Purchases - SEWD	9,539.7	9,539.7	0.0	0.0%
Total production	13,967.3	13,712.5	(254.8)	-1.8%

TABLE 2-6

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

OPERATING REVENUES

TEST YEAR 2011

(AT PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
WRAM Revenues				
Residential	11,801.4	11,626.7	(174.7)	-1.5%
Business	4,134.8	4,338.3	203.5	4.9%
Multiple Family	1,612.6	1,504.2	(108.4)	-6.7%
Industrial	1,961.7	1,941.1	(20.6)	-1.1%
Public Authority	1,824.0	1,850.2	26.2	1.4%
Other	48.8	48.8	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	21,383.3	21,309.4	(73.9)	-0.3%
Non-WRAM Revenues				
Service Charges	8,143.4	8,148.6	5.2	0.1%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	385.1	385.1	0.0	0.0%
Public Fire Protection	23.6	23.6	0.0	0.0%
Other	(48.6)	(48.6)	0.0	0.0%
Total Flat Rate	8,503.5	8,508.7	5.2	0.1%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	29,886.8	29,818.0	(68.8)	-0.2%

TABLE 2-7

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

OPERATING REVENUES

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
WRAM Revenues				
Residential	14,601.6	14,385.4	(216.2)	-1.5%
Business	5,857.0	6,145.3	288.3	4.9%
Multiple Family	2,290.7	2,136.8	(153.9)	-6.7%
Industrial	2,841.3	2,811.5	(29.8)	-1.0%
Public Authority	2,620.0	2,657.8	37.8	1.4%
Other	69.8	69.8	0.0	0.0%
Irrigation	0.0	0.0	0.0	0.0%
Recycled	0.0	0.0	0.0	0.0%
Total General Metered	28,280.4	28,206.6	(73.8)	-0.3%
Non-WRAM Revenues				
Service Charges	8,015.3	8,020.7	5.4	0.1%
Residential Flat	0.0	0.0	0.0	0.0%
Private Fire Protection	412.6	412.6	0.0	0.0%
Public Fire Protection	25.3	25.3	0.0	0.0%
Other	(49.7)	(49.7)	0.0	0.0%
Total Flat Rate	8403.5	8408.9	5.4	0.1%
Deferred Revenues	0.0	0.0	0.0	0.0%
Total revenues	36,683.9	36,615.5	(68.4)	-0.2%

CHAPTER 3: OPERATIONS AND MAINTENANCE EXPENSES

A. INTRODUCTION

This Chapter presents DRA's analysis and recommendations on Operation and Maintenance ("O&M") expenses in the Stockton District of California Water Service Company ("CWS") for Test Year 2011. Table 3-A shows a comparison of total expense estimates at present rates for Test Year.

Table 3-A: Comparison of Total O&M Expense Estimates

Test Year 2011			
Items	DRA	CWS	CWS Exceeds DRA
O&M Expenses	$12,839,500	$14,726,100	$1,886,600 or 14.7%

B. SUMMARY OF RECOMMENDATIONS

DRA's estimate for Total O&M expenses for Test Year 2011 is $12,839,500. CWS' Test Year 2011 estimate is $14,726,100. CWS' estimate exceeds DRA's by $1,886,600, or 14.7%. DRA recommends that the Commission adopts its O&M expense estimates.

C. DISCUSSION

DRA conducted an independent analysis of CWS' workpapers and methods of estimating O&M Expenses for Test Year 2011. CWS uses a five-year average of historical expenses adjusted for inflation as the basis for projecting Test Year 2011 with the exception of Purchased Water, Groundwater Extraction Charges, Purchased Power, Purchased Chemicals, Postage, and Transportation.

DRA utilizes multiple regression analyses and other methods including last recorded year (2008) data adjusted for inflation, a three-year (2006-2008) average,

and a five-year (2004-2008) average of historical expenses adjusted for inflation to assess the reasonableness of CWS' estimates.

Both DRA and CWS apply the various escalation factors, published by DRA Energy Cost of Service Branch ("ECOS"), dated May 31, 2009, to develop the estimated Test Year level of expenses. Table 3-1 summarizes DRA's recommended O&M expenses and compares them to CWS' requests for Test Year 2011. Each expense item listed is discussed below.

1) OPERATION EXPENSES

(a) PURCHASED WATER

CWS' estimate of Purchased Water in Test Year 2011 is $5,417,600. CWS purchased water from Stockton East Water District and pays a fixed monthly fee for the water. CWS' estimated Purchased Water expenses are calculated by multiplying the monthly rate by the number of months per year (12 months). After reviewing CWS' supporting documents, DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

(b) GROUNDWATER EXTRACTION CHARGES

CWS' estimate of Ground Water Extraction Charges is $1,377,800 in Test Year 2011. These charges, influenced mainly by the well water production, are assed by the Stockton East Water District.

CWS estimated Ground Water Extraction Charges based on the estimated water production times the Municipal Groundwater Assessment rate of $136.68 per acre foot, which was derived from the 2007 GRC settlement. DRA's estimate of Ground Water Extraction Charges is $1,473,900 in Test Year 2011. DRA's estimate was $96,100 higher than CWS' estimate because DRA uses the most current Municipal Groundwater Assessment rate of $144.71 per acre foot. DRA recommends that the Commission adopt its estimate.

(c) PURCHASED POWER

Purchased Power is the cost of electricity from Pacific Gas and Electric needed to operate a district, including the power used in pumping and delivering water. Estimating Purchased Power expenses is a function of (a) the estimated production and (b) the estimated cost per kilowatt hour ("KWH"), taking into account the historical ratios of electricity used to the amount of water pumped. Therefore, the cost of purchased power may vary with the changes in the estimates of either production, cost per KWH of electricity, or a combination of both.

CWS generally estimates cost per KWH using one of the following two methods – (1) if a linear regression analysis shows a strong relationship between cost per KWH and timing, CWS uses its linear regression forecast methodology of cost per KWH based on a two-year 12-month rolling average of actual cost per KWH for estimating Purchased Power expenses; otherwise, (2) CWS uses a two-year average of 12-month rolling averages of actual cost per KWH in estimating Purchased Power expenses.

Based on DRA's review of CWS' supporting workpapers, CWS' total power costs consist of purchased power for Well Pumping and Booster Pumping.

CWS calculates the Well Pumping power costs using the forecasted cost per KWH of $0.15953. Similarly, CWS calculated the Booster Pumping power costs using the forecasted cost per KWH of $0.21619. DRA accepts CWS' methodology in estimating Purchased Power costs.

CWS' estimate of Purchased Power is $789,000 in Test Year 2011. Based on the review of CWS' workpapers, DRA's estimate of Purchased Power is $797,100, which is $8,100 more than CWS' estimate. The difference between DRA and CWS estimates is due to differences in water production estimates. DRA recommends that the Commission adopt its estimate.

(d) PURCHASED CHEMICALS

CWS' estimate of Purchased Chemicals expense is $87,600 in Test Year 2011 based on a two-year (2007-2008) average cost per unit of production adjusted for inflation and the estimated production. After reviewing CWS' supporting documents, DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

(e) OPERATION PAYROLL

For Operation Payroll expenses please refer to the Payroll Report.

(f) POSTAGE

CWS' estimate of Postage expenses is $177,200 in Test Year 2011. CWS' postage cost is a function of (a) the 2008's unit cost per customer service or connection, (b) the estimated numbers of connection, and (c) a 4.8% increase in postal first-class rate that was effective May 11, 2009[9], plus inflation. DRA adjusts CWS' estimate by (1) reducing the postal rate increase from 4.80% to 3.17% in May 11, 2009, and (2) excluding the escalation factors from DRA's postage expense estimate. Since CWS primarily utilizes bulk rates (Classes A5, A6, A7, and A8) for its mailings, DRA computed the average bulk rate increase based on reviewing the bulk rates schedule. DRA concludes the average bulk rate increase is 3.17%, which is what DRA uses in its estimates. Also, as future postal rate increases are unknown, an escalation factor should be excluded from the calculation. DRA's estimate of Postage expenses is $165,300 for the Test Year 2011, which is $11,900 less than CWS' estimate. DRA recommends that the Commission adopt its estimate.

[9] According to CWS' General Report, dated July 1, 2009, p25, 'District Postage'

(g) OPERATION TRANSPORTATION

According to last year's recorded data ratios, total Transportation expense includes three components: Operation, Maintenance, and Administration and General ("A&G").

CWS' estimate for total Transportation expense is $370,400 in Test Year 2011 based on the last recorded year (2008) adjusted for inflation. The total is broken down as $282,100, $84,200, and $4,200 for Operation, Maintenance, and A&G, respectively.[10] CWS did not include any new vehicle expense in its Transportation expense estimates.

DRA's estimate for total Transportation expense is $320,800 in Test Year 2011 based on the five-year (2004-2008) adjusted for inflation. The total is broken down as $244,300, $72,900, and $3,600 for Operation, Maintenance, and A&G, respectively. Using a five-year average would better reflect CWS' historical trends. DRA recommends that the Commission adopt its estimate.

(h) UNCOLLECTIBLES

An estimate of Uncollectible expenses is a function of (a) the estimated total revenue and (b) a five-year average (when appropriate) of historical uncollectible rates. DRA agrees with CWS' methodology in estimating Uncollectible expenses. CWS' estimate for Uncollectible expenses is $380,000 in Test Year 2011 based on a five-year (2004-2008) average of uncollectible rate of 1.27450%. DRA's estimate for uncollectible expenses is $380,900, resulting in $900 more than CWS' estimate. The difference in estimated Uncollectible expenses between DRA and CWS is due to the differences in estimated revenue. DRA recommends that the Commission adopt its estimate.

[10] The sum of allocated Transportation expenses to Operation, Maintenance, and A&G does not agree with the total Transportation expense due to rounding. CWS' Amounts present here are based strictly on CWS' original application workpaper, Table 5-B4.

(i) SOURCE OF SUPPLY

CWS' estimate for Source of Supply expenses is $100 in Test Year 2011 based on a five-year (2004 to 2008) average adjusted for inflation. DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

(j) PUMPING EXPENSES

Pumping expenses include the expenses of waste oil disposal, inspection of storage tanks related to pumping, testing and cleaning pumps and motors including supplies such as lubricants, fuses, gaskets, charts and the like, and power used for pumping.[11] CWS' estimate for Pumping expenses is $130,700 in Test Year 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

(k) WATER TREATMENT

Water Treatment expenses include the expenses of operating filter and treatment plants, chlorinating equipment, outside laboratory expenses, laboratory supplies, postage on water samples, water quality notices and advertisements, accrual for DPH fees including system inspections, water treatment operators' tests and certification costs, hazardous material disposal, and environmental handling and reporting.

For Water Treatment expenses, CWS' estimate is $78,200 in Test Year 2011 based on the five-year (2004-2008) average adjusted for inflation. DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

[11] Per CWS' response to DRA data request, RYY-005, Question 5, dated October 19, 2009.

(l) TRANSMISSION AND DISTRIBUTION

Transmission and Distribution ("T&D") expenses include expenses incurred in operating distribution reservoirs and tanks, including cleaning and flushing, care of grounds, flushing of mains and services, potholing (digging to verify depth and location of pipelines), corrosion tests, fire flow tests, locating and operating valves and supplies necessary to operate the District's transmission and distribution system. For T&D expenses, CWS' estimate is $233,300 in Test Year 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA's estimate of T&D expense is $173,500, which is $59,800 less than CWS' estimate. DRA excludes the 2004 and 2005 recorded Transmission and Distribution expenses from its estimates because the expenses in those two years were unusually high. Using a three-year (2006-2008) average would better reflect CWS' historical trends. DRA's estimate is also more reflective of CWS' annualized 2009 actual expenses. Therefore, DRA recommends that the Commission adopt its estimate.

(m) CUSTOMER ACCOUNTING

Customer Accounting expenses include all costs related to customer billing such as bill stock, envelopes, billing inserts (except for conservation), fees paid to collection agencies and pay stations, bank charges, alarm systems, telephone charges including meter reading communication lines, janitorial services for the commercial office, and other expenses related to billing customers. For Customer Accounting expenses, CWS' estimate is $228,900 for Test Year 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

(n) CONSERVATION EXPENSES

For Conservation Expenses, please refer to the Conservation Expenses report.

2) MAINTENANCE EXPENSES

(a) MAINTENANCE PAYROLL

For Maintenance Payroll Expenses, please refer to the Payroll report.

(b) MAINTENANCE TRANSPORTATION

For an estimate of Maintenance Transportation expense, please refer to Section (g) of this Chapter.

(c) STORES

CWS estimated Stores expenses to be $122,800 for Test Year 2011 based on a five-year (2004-2008) average adjusted for inflation. DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

(d) CONTRACTED MAINTENANCE

CWS' estimate for Contracted Maintenance expenses is $495,100 in Test Year 2011 based on the five-year (2004-2008) average adjusted for inflation. CWS' estimates included one-third of the 2011 well (Station 71-01) rehabilitation costs of $125,000 in the 2011 estimated Contracted Maintenance expenses. For Year 2012, DRA also allow CWS' request for one well (Station 61-01) rehabilitation costs of $135,000, which will be amortized over three years. DRA concludes that CWS' methodology and estimate are reasonable, and therefore recommends that the Commission adopt CWS' estimate.

D. CONCLUSION

DRA recommends that the Commission adopt its O&M expense estimates.

TABLE 3-1

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

OPERATION & MAINTENANCE EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
At present rates				
Operating Revenues	29,886.8	29,818.0		
Uncollectible rate	1.27450%	1.27450%		
Uncollectibles	380.9	380.0	(0.9)	-0.2%
Operation Expenses				
Purchased Water	5,417.6	5,417.6	0.0	0.0%
Replenishment Assessment	0.0	0.0	0.0	0.0%
Groundwater Extraction Charges	1,473.9	1,377.8	(96.1)	-6.5%
Purchased Power	797.1	789.0	(8.1)	-1.0%
Purchased Chemicals	87.6	87.6	0.0	0.0%
Payroll	1,931.9	2,229.4	297.5	15.4%
Postage	165.3	177.2	11.9	7.2%
Transportation	244.3	282.1	37.8	15.5%
Uncollectibles	380.9	380.0	(0.9)	-0.2%
Source of Supply	0.1	0.1	0.0	0.0%
Pumping	130.7	130.7	0.0	0.0%
Water Treatment	78.2	78.2	0.0	0.0%
Transmission & Distribution	173.5	233.3	59.8	34.5%
Customer Accounting	228.9	228.9	0.0	0.0%
Conservation	293.9	1,752.7	1458.8	496.4%
Total Operation Expenses	11,403.9	13,164.6	1760.7	15.4%
Maintenance Expenses				
Payroll	744.8	859.5	114.7	15.4%
Transportation	72.9	84.2	11.3	15.5%
Stores	122.8	122.8	0.0	0.0%
Contracted Maintenance	495.1	495.1	0.0	0.0%
Total Maintenance Expense	1,435.6	1,561.5	125.9	8.8%
Total O & M Expenses (incl uncoll)	12,839.5	14,726.1	1886.6	14.7%
At proposed rates				
Operating Revenues	36,683.9	36,615.5		
Uncollectible rate	1.27450%	1.27450%		
Uncollectibles	467.5	466.7		
Total O & M Expenses (incl uncoll)	12,926.1	14,812.8	1886.6	14.6%

CHAPTER 4: ADMINISTRATIVE & GENERAL EXPENSES

A. INTRODUCTION

This Chapter presents DRA's recommended expense levels for California Water Service Company's ("CWS") 2011 Test Year Administrative and General ("A&G") expenses for the Stockton District.

The categories of A&G expenses cover general expenses including Payroll, Transportation Expenses, Rent, Administration Charges Transfer, Workers' Compensation, Nonspecific Expenses, Amortization of Limited Term Investments and Dues and Donations Adjustment. Table 4-1 presents a comparison of total expense estimates for Test Year 2011.

DRA analyzed CWS' exhibits, supporting workpapers, CWS' responses to DRA's data requests, information provided in meetings, phone conversations, e-mails, and CWS' methods of estimating A&G expenses.

B. SUMMARY OF RECOMMENDATIONS

DRA's estimated total for A&G expenses is $3,101,100 for Test Year 2011. CWS' estimate for the same period is $3,437,300 or 10.8% more than DRA. DRA's estimated total for A&G expenses is $3,133,500 for 2012. CWS' estimate for the same time period is $3,527,700 or 12.6% more than DRA. The difference between the forecasted expense levels of DRA and CWS is the result of: 1) DRA's 2011 Test Year estimates of the various A&G activity expenses; 2) account by account adjustments; 3) different methodologies; and 4) the use of the May 2009 Energy Cost of Service Branch escalation factors memo to derive the estimates as discussed below.

C. DISCUSSION

1) Methodology

DRA conducted an independent analysis of CWS workpapers and methods of estimating the A&G expenses. DRA analyzed CWS' application and exhibits, supporting workpapers, CWS' data request responses, information provided in meetings, field trips to CWS site locations, telephone conversations and e-mails. In general, DRA uses a five-year (2004-2008) average to derive its A&G expense estimates where it had differences with CWS. DRA also removes unusual expenses recorded in certain years to arrive at a different total than CWS, in particular for Nonspecific Expenses. DRA applies its escalation factors to all A&G accounts.

2) Payroll

For A&G payroll expense, please refer to DRA's Payroll Report.

3) Employee Benefits

There were no methodical differences between DRA and CWS in calculating employee benefits. DRA's estimates for the accounts below are based on (1) total payroll dollars, and (2) total number of employees. CWS' estimates are also a function of these two factors. Per employee unit benefit costs were developed by Milliman[12] and are based on a variety of actuarial assumptions. The underlying assumptions, except for the escalation factors, were accepted by DRA. Any differences are, therefore, attributable to different escalation factors and differing estimates for total company payroll and total General Office and district employees for 2011 and 2012.

[12] Milliman is CWS' Pensions and Benefits actuarial consultants.

DRA recommends the following amounts (thousands of dollars) for Account 795, Pensions and Benefits:

	DRA		CWS	
	2011	**2012**	**2011**	**2012**
Total Account 795	$2,199.5	$2,212.1	$2,417.9	$2,456.0

All company benefits are accounted for in general operations and allocated to each of the districts using the four-factor method of allocation. In general benefit costs are a function of employee payroll dollars, and/or the number of employees. The following is a breakdown of the sub-accounts included in the total Account 795 Pensions and Benefits:

(a) **Account 7951-1 Retirement Savings Plan.**

CWS provides employees with a 401(k) program and matches 50% of employee contributions up to 8% of payroll or the statutory contribution limit, whichever is less. Therefore, CWS' maximum contribution is 4% of company payroll. However, not all employees participate in the program. Based on actual participation levels, CWS' matching contribution during the last five years, was approximately 3%. This rate was used by CWS to forecast the test year amount, and is in line (or comparable) to those offered by other California utilities.[13]

DRA estimated the test year contribution based on the five-year average contribution percentage of 3%, which was multiplied by DRA's estimate of total company payroll (in 2011 and 2012).

[13] The 3% rate is in line with the 401(k) plans offered by San Jose Water, PG&E, Southern California Edison, and Sempra Energy. See the Milliman analysis, CWS General Report, Tab 12.

(b) **Account 7951-2 Retirement Fund.**

CWS' pension funding estimate is based on an actuarial forecast from Milliman. The Milliman analysis also reflects a unit cost per employee which DRA and CWS applied to the estimated number of employees to arrive at the test year's estimate. DRA and CWS' estimates differ because of different escalation factors and different estimates for total employees in the General Office and all districts.

The Milliman forecast is based on certain assumptions such as population growth, payroll changes, and salary adjustments. The Milliman forecast also assumes a long term rate on plan assets of 6.75%, and a discount rate of 5.75% for the years 2011 through 2013. CWS follows FASB[14] Statement of Financial Accounting Standards (SFAS) No. 87, as modified by SFAS 132 and SFAS 158.[15] CWS has followed SFAS 87 since it became effective in 1987. Prior to 1987, CWS pension costs equaled the cash contributions to the pension plan determined in accordance with ERISA.[16] The test year projections are based on Milliman's actuarial valuation as of January 1, 2009 for determining the Net Periodic Benefit Cost under SFAS 87. The underlying pension costs assumptions were accepted by DRA.

DRA was persuaded that CWS had taken appropriate steps to mitigate the ratepayer impact of Plan costs. Further, CWS undertook the following measures to avail itself of the benefits provided under (a) The Pension Protection Act of

[14] Financial Accounting Standards Board.
[15] CWS' response to DRA Data Request JRC-2, Q.7.
[16] Employment Retirement Income Security Act, or Federal law.

2006, (PPA) and (b) The Worker, Retiree and Employer Recovery Act (WRERA) of 2008:[17]

(i) CWS fully complied with PPA and WRERA. CWS modified the actuarial cost method for purposes of determining the minimum funding requirement to the Unit Credit method. CWS also adopted the use of the "3-segment" interest rates (for the 2008 minimum funding requirement) and the "full yield curve" (for the 2009 minimum funding requirement). The actuarial valuations for 2008 and 2009 have shown that the contributions by CWS will satisfy the minimum funding requirements as modified by PPA and WRERA.

(ii) In December 2008, CWS made an election to voluntarily reduce its carryover balance (i.e., pre-PPA credit balance) of $1,537,616 as of January 1, 2008 to $0, so that such amount could be included in its plan assets. This was done in order to improve the plan's funded percentages under PPA. In 2009, CWS elected to use the "full yield curve" to determine the funding target under PPA. This increased the plan's funded percentage for 2009.

(c) **Account 7952- Group Health Insurance.**

CWS administers its own (self-insured) employee health care plan. The cost of health insurance is based on actual claims experience and not outside premium payments. The plans include Medical, Dental and Vision care. Further, the plans are on the PPO model where employees are encouraged to use network health care providers in order to minimize costs. CWS' estimate is based on an actuarial forecast from Milliman and includes employee contributions of $125 per month. The Milliman forecast assumes that overall medical cost inflation will

[17] CWS' response to DRA Data Request JRC-2, Q.1.

continue to be 10% annually for the forecast period.[18] The Milliman analysis also reflects a unit cost per employee which DRA and CWS applied to the estimated number of employees. DRA and CWS' estimate differs because of different escalation factors and different estimates for total employees in the General Office and all districts. The underlying forecast assumptions were accepted by DRA.

(d) **Account 7952-1 Retiree Group Health Insurance.**

CWS administers its own (self-insured) retiree health care plan. Therefore, costs for these plans are based on claims experience, not outside premium payments. The plans are on the PPO model, where employees are encouraged to use network providers in order to minimize costs. Further, retirees pay a monthly premium of $300 per person (a retiree and spouse pay $600 per month). This rate decreases to $144 per person when there is other coverage such as Medicare.

The retiree plan is funded in advance in accordance with SFAS 106, which requires that annual funding of the plan be based on an actuarial analysis of the expected future expense arising during the employee service time. CWS' estimate is based on an actuarial forecast from Milliman. The Milliman forecast assumes that overall medical cost inflation will continue to be 10% annually for the forecast period. The Milliman analysis also reflects a unit cost per employee which DRA and CWS applied to the estimated number of employees. DRA and CWS' estimate differs because of different escalation factors and estimates for total employees in the General Office and all districts. The underlying forecast assumptions, except for the escalation factors, were accepted by DRA.

[18] Dental and Vision care inflation is forecasted at 5% each for 2011 through 2013.

4) Transportation Expense

DRA addresses Transportation Expense in Chapter 3 Operations and Maintenance Expenses of this Report. DRA's estimate for transportation expenses is $3,600 for Test Year 2011; CWS' estimate for the same time period is $4,200 or 16.7% more than DRA. DRA's estimate for 2012 is $3,700; CWS' estimate for the same period is $4,300 or 16.2% more than DRA.

5) Rent

CWS' has estimated rental expense of $92,000 for Test Year 2011 and $94,400 for 2012.[19] DRA has verified the information regarding the company's rental expense, and recommends adopting this estimate for CWS' Rent expense.

6) Administration Charges Transfer

Administration Charges Transfer represents credits for unregulated activity. CWS' estimate of $108,000 for Test Year 2011, and $108,000 for 2012, for Administration Charges Transferred based upon the last recorded year.[20] DRA reviewed CWS' workpapers and recommends adopting these estimates for Administration Charges Transferred.

7) Workers Compensation

CWS' estimate of $160,500 in Test Year 2011 and $176,900 in 2012 for Workers Compensation is based on actuarial expectations conducted by actuaries at Milliman USA ("Milliman"). An assumption embedded in the estimate is a provision to account for Workers' Compensation to include expected future payments from current employment.[21] In other words, instead of basing the costs

[19] Refer to Report on the Results of Operation and Prepared Testimony for the Stockton District, Chapter 6.

[20] Refer to CWS' Formal Application Workpapers for the Stockton District, Table 6-B.

[21] Refer to General Report on the Results of Operations and Prepared Testimony, pg. 62.

on the well-established "pay-as-you-go methodology" that the Commission has consistently utilized, CWS proposes changing to an accrual basis and including the amortization of past liabilities for which payments have not yet been made.

In the prior rate case, CWS requested the same methodology change. DRA disagreed and calculated a percentage reduction at the General Office level based on the 2002-2006 average for the prior Test Year 2008-2009. The Commission similarly applied DRA's recommended reduction to all the districts in that case. In D. 08-07-008 (pages 25-26, Section 4.7 on Workers' Compensation), the Commission upheld the use of the "pay-as-you-go methodology" for accounting for Workers' Compensation insurance costs.

For the current rate case, DRA continues to disagree with CWS' proposed change in recovery methodology and recommends continuing the "pay-as-you-go methodology" for recovering this cost. To put in perspective CWS' current proposal for Test Year 2011, on a company-wide basis, i.e., 24 districts plus General Office, CWS' total proposed Workers' Compensation is $2,747,250. This amount is almost triple the total 2008 recorded amount of $992,800 and about 70% higher than the 2004-2008 five year average (in 2009 dollars) of $1,643,900.

DRA reviewed the recorded amounts for Workers' Compensation for this district. DRA believed the recorded amounts for 2004 to 2008 are more reflective of the "pay-as-you-go methodology" for accounting for Workers Compensation that the Commission approved in D. 08-07-008. DRA then took a five-year average of these recorded amounts, escalated the five-year average using DRA's labor escalation factors to derive its Test Year 2011 and 2012 forecast of $145,300 and $145,300 respectively for the Stockton District.

DRA recommends adopting its estimate for Workers Compensation for the Test Year for this district.

8) Nonspecific Expenses

Nonspecific Expenses generally represent miscellaneous administrative and general expenditures. The Nonspecific Expenses account contains various sub-accounts. However, CWS does not provide estimated amounts for each sub-account for future years. Instead, it provides a compound figure for Nonspecific Expenses that are based on historical spending levels in all sub-accounts. CWS Nonspecific Expenses estimates for the Test Year 2011 and 2012 of $214,800 and $219,200 respectively are based on a five-year average. DRA reviewed all sub accounts within Nonspecific Expenses and adjusted some amounts for the years 2004 through 2008 under the following subaccounts: Account 792601 – Travel Meals Expense by $12,930, Account 792602 – Meal at CWS by $16,763, Account 799500 – Miscellaneous General Expense by $15,298, and Account 799501- Moving Costs by $66,236. DRA then escalated its five-year average using DRA's composite escalation factors to derive its Test Year 2011 forecast. DRA's estimates of $191,500 and $196,400 for Nonspecific Expenses for Test Year 2011 and 2012 respectively are lower than CWS' Nonspecific estimates. CWS' Nonspecific forecasts of $214,000 and $219,500 respectively exceed DRA's estimates by $22,500 and $23,100, or 11.7% and 11.8% respectively for Test Year 2011 and 2012. DRA's reasons for these adjustments are described below:

(a) Account 792601 – Travel Meals

DRA discovered and removed expenditures in this account from 2004 through 2008 for Bar-B-Que for management, Food Parties, Employee Appreciation Day, Holiday Breakfast's, a Retirement Party, a retirement dinner, and a Holiday Luncheon. DRA believes that the previously mentioned expenditures were of no benefit to ratepayers, and removed them from DRA's estimate.

(b) Account 792602 – Meals at CWS

DRA discovered and removed expenditures in this account from 2004 through 2008 for 50 people Tri Tip / Catering / Ribs/Chicken/Pesto Bread, Employee Celebration Day's. DRA believes that the previously mentioned expenditures were of no benefit to ratepayers, and removed them from DRA's estimate.

(c) Account 799500 - Miscellaneous General Expenses

DRA identified expenditures in this account from 2004 through 2008 for Party Supplies, Golf Balls, and Tee's, Celeb Day Expenses, Adult Basketball League, Recreation Basketball League, Employee Appreciation Day Expenses, Gift Cards, Sponsorship Golf Tournament, a Retirement Gift, two Retirement Dinners, Uniforms for Basketball Team, Supplies for Employee App. Day, Reimbursement of 4 tickets, and Yoga Classes. DRA believes that the previously mentioned expenditures were of no benefit to ratepayers, and removed them from DRA's estimate.

(d) Account 799501 – Employee Moving Costs

DRA identified expenditures in this account from 2004 through 2008 for multiple Moving expenses for company employees. DRA believes that the previously mentioned expenditures were of no benefit to ratepayers, and removed them from DRA's estimate.

9) Amortization of Limited Term Investment

This expense pertains to the amortization of intangible assets, such as capital planning studies. CWS' estimates $69,500 for Amortization of Limited Term Investment. CWS bases its estimate from the general method for this

expense shown on CWS' amortization schedule. DRA reviewed this account and recommends adopting CWS' estimate for Test Year 2011 and 2012.

10) Dues and Donations Adjustment

The Dues and Donations Adjustment represents CWS' adjustment of non-professional dues paid historically, for ratemaking purposes. CWS' estimate for Dues and Donations Adjustment is ($8,200). DRA has reviewed CWS' workpapers and recommends adopting CWS' estimate.

D. CONCLUSION

DRA recommends that the Commission adopt DRA's A&G Expenses for the Stockton District.

TABLE 4-1

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

ADMINISTRATIVE & GENERAL EXPENSES

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
At present rates				
Oper. Rev. less uncoll.	29,505.9	29,818.0		
Local Franchise Rate	0.4858%	0.4858%		
Franchise tax	143.4	144.9	1.5	1.1%
Payroll	515.9	595.4	79.5	15.4%
Benefits	2,199.5	2,417.9	218.4	9.9%
Transportation Expenses	3.6	4.2	0.6	16.7%
Rent	92.0	92.0	0.0	0.0%
Admin Charges Trsf	(108.0)	(108.0)	0.0	0.0%
Worker's Compensation	145.3	160.5	15.2	10.5%
Nonspecifics	191.5	214.0	22.5	11.7%
Amort of Limited Term Inv.	69.5	69.5	0.0	0.0%
Dues & Donations Adjustment	(8.2)	(8.2)	0.0	0.0%
Total A & G Expenses	3,101.1	3,437.3	336.2	10.8%
(incl. local Fran.)	3,244.5	3,582.2	337.7	10.4%
At proposed rates				
Oper. Rev. less uncoll.	36,216.4	36,615.5		
Local Franchise Rate	0.4858%	0.4858%		
Fran. tax	176.0	177.9	1.9	1.1%
Total A & G Expenses	3,101.1	3,437.3	336.2	10.8%
(incl. local Fran.)	3,277.1	3,615.2	338.1	10.3%

CHAPTER 5: TAXES OTHER THAN INCOME

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations on Taxes Other Than Income for the Stockton District of California Water Service's (CWS) Test Year 2011 General Rate Case. The category of Taxes Other Than Income is comprised of ad valorem (property taxes), business license fees, local franchise fees, and payroll taxes.

B. SUMMARY OF RECOMMENDATIONS

Differences between CWS' and DRA's estimates for Taxes Other Than Income are primarily due to differences in revenue, plant and payroll estimates. The methodologies used by CWS in estimating future taxes and fees are detailed below. Anywhere DRA has made adjustments to improve the consistency or accuracy of estimates has also been noted below.

C. DISCUSSION

1) AD VALOREM TAXES

CWS estimates future ad valorem taxes using the actual ad valorem tax percentage from the last recorded year. This percentage is applied to the following year's estimated net total of utility property accounts.[22] The pro-forma ad valorem estimate is the arithmetic average of the two years. DRA accepts this methodology and notes that differences between CWS and DRA estimates are due to differences in estimations of future plant.

[22] Net Total of Property = plant + materials & supplies + construction work in progress + present value of advances – advances & contributions – deferred income tax

2) BUSINESS LICENSE and LOCAL FRANCHISE FEES

The Stockton District pays a fixed business license fee in the City of Stockton. The supporting workpapers used an effective percentage to estimated future revenue. DRA corrected the workpapers to a fixed fee. The Stockton District pays a 2% franchise fee on revenue attributable to customers in areas of San Joaquin County. Based upon 2008 recorded taxes, the Franchise Fee for the district is 0.486% of district revenue. CWS applies this effective percentage to estimated future revenues. DRA accepts CWS' estimates for the business license fee, as modified, and the franchise fee and notes that any differences are the result of different estimates of future revenue.

3) PAYROLL TAXES

CWS estimates future payroll taxes using projected payroll amounts and the effective tax rates from the last recorded year. The three components of payroll taxes are Federal Insurance Contributions (FICA), Federal Unemployment Insurance (FUI) and State Unemployment Insurance (SUI). All three components have statutory limits governing the maximum percentage that can be collected from employers (*see table, below*).

PAYROLL TAXES		2009 MAXIMUM	EXPLANATORY NOTES
FICA	Social Security Tax	6.2%	Social Security Tax is 6.2% applied to only the first $106,800 of an employee's salary.
	Medicare Tax	1.45%	
FUI Tax		0.8%	Federal Unemployment Tax is 6.2% reduced by an offset credit of up to 5.4% for a total of 0.8% on the first $7,000 of employee wages ($56 per employee).
SUI Tax (CA)		6.3%	State Unemployment Taxes vary by company from 1.5% to 6.2% plus an Employment Training Tax Rate of 0.1% for a maximum tax percentage of 6.3%.

In general, DRA accepts the methodology utilized by CWS to estimate future payroll taxes. An adjustment was made by DRA to the imputed FICA percentage used by CWS for the Stockton District (8.46%) to coincide with the maximum tax (7.65%) that can be collected for the combined Social Security and Medicare Taxes (see table above). All other differences between DRA and CWS estimates result from differences in estimates of future payroll.

D. CONCLUSION

DRA recommends Commission adoption of DRA's estimates of Taxes Other Than Income that are presented in Table 5-1.

TABLE 5-1

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

TAX DEDUCTIONS AND CREDITS

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Ad Valorem taxes	640.2	779.0	138.8	21.7%
Local Franchise (pres rates)	143.4	144.9	1.5	1.1%
Local Franchise (CWS prop rates)	176.0	177.9	1.9	1.1%
Social Security Taxes	259.7	329.7	70.0	27.0%
Business License (pres rates)	4.7	4.7	0.0	0.0%
Business License (CWS prop rates)	5.8	5.8	0.0	0.0%
Taxes other than income (present rates)	1,048.0	1,258.3	210.3	20.1%
Taxes other than income (CWS proposed rates)	1,081.7	1,292.4	210.7	19.5%
State Tax Depreciation	4,039.2	4,643.8	604.6	15.0%
Transp. Dep. Adj.	(97.5)	(104.3)	(6.8)	7.0%
State Tax Deduct(pres rates)	3,941.7	4,539.5	597.8	15.2%
State Tax Deduct (CWS prop rates)	3,941.7	4,539.5	597.8	15.2%
Fed. Tax Depreciation (pres rates)	2,926.2	3,364.2	438.0	15.0%
State Income Tax (pres. rates)	335.9	(92.8)	(428.7)	-127.6%
State Income Tax (CWS prop rates)	926.1	497.4	(428.7)	-46.3%
Pre. Stock Div. Credit	0.0	0.0	0.0	0.0%
DPAD (pres. Rates)	(131.9)	(5.4)	126.5	-95.9%
DPAD (CWS prop. Rates)	(307.2)	(583.3)	(276.1)	89.9%
Fed. Tax Deduct.(pres rates)	3,130.3	3,266.0	135.7	4.3%
Fed. Tax Deduct (CWS prop rates)	3,545.1	3,278.3	(266.8)	-7.5%

CHAPTER 6: INCOME TAXES

A. INTRODUCTION

This chapter presents DRA's analysis and recommendations on Income Taxes for the Stockton District of California Water Service (CWS) Test Year 2011 General Rate Case. In developing its recommendations, DRA reviewed the reports, workpapers, and data responses of CWS in conjunction with information obtained from the California Franchise Tax Board and the Internal Revenue Service.

B. SUMMARY OF RECOMMENDATIONS

The majority of the differences between CWS and DRA estimates of Income Taxes are attributable to differences in estimated revenue, expenses, and rate base. Anywhere DRA has made adjustments to the estimating methodology used by CWS is detailed below. The four areas in which DRA made adjustments to CWS calculations for Stockton pertain to the: (1) federal deduction of the California Corporate Franchise Tax, (2) California Corporate Franchise Tax total percentage, (3) calculation of the interest expense deduction, and (4) domestic production activities deduction.

C. DISCUSSION

1) DRA ADJUSTMENTS

(a) Federal Deduction of California Corporate Franchise Tax (CCFT)

D.89-11-058, issued in November of 1989, required that the prior year's CCFT be used as the deduction for calculation of test year federal income taxes. As discussed throughout the decision, companies at that time were required to pay

estimated California taxes one year in advance.[23] D.89-11-058 corrected the timing difference between when companies had previously paid California taxes and when they had realized such payment as a deduction for federal income taxes.

Since 1989, the California Tax Code has changed so that corporations are no longer required to make estimated CCFT payments to the state one year in advance. In fact, California tax law now requires corporations to compute an estimated tax "upon the basis of the net income for that taxable year."[24] As such, DRA recommends using the current year's CCFT as a deduction in the current year's calculation of federal income taxes. Differing from D.89-11-058 yet more representative of current California tax practice, DRA's methodology provides a more accurate estimate of a utility's assumed tax consequences and revenue requirements. More importantly, consistent with long-standing regulatory tradition and Generally Accepted Accounting Procedures (GAAP), the DRA methodology more closely adheres to the fundamental "matching principle," where costs incurred in a given period should be matched against the revenue or benefits received in the same period.

(b) California Corporate Franchise Tax Total Percentage

Referencing D.84-05-036 yet failing to cite the specific ordering paragraph, section, or discussion, CWS added six-basis points to the CCFT percentage used to estimate state taxes for test year and escalation years. Through data requests, review of Commission decisions, and personal interviews, DRA attempted to find some justification for CWS' inclusion of an additional 0.06% in state tax estimates. Unable to substantiate the validity of this addition, DRA removed the percentage, which reduced CCFT estimates by 0.06%.

[23] California Revenue and Taxation Code, Part 11, Chapter 2, Article 2, Section 23151(f)(2)
[24] Ibid

(c) Calculation of the Interest Expense Deduction

A formula error in CWS' workpapers for calculating the Interest Expense Deduction resulted in Working Cash being subtracted from Rate Base. DRA has corrected this error in the calculation of the deduction for Stockton. The recommended Interest Expense Deduction now equals Rate Base (including working cash) multiplied by the current CWS weighted-average-cost-of-debt (3.16%).[25]

(d) Domestic Production Activities Deduction (DPAD)

Beginning in taxable year 2010, Section 199 of the IRS Code allows a deduction equal to 9% of a taxpayer's qualified production activities income (QPAI). The calculation of this deduction by CWS for Stockton assumes that all income is from qualified production activities. This assumption results in an overestimation of the allowable deduction and an underestimation of the district's assumed taxes. DRA has corrected the DPAD calculation for Stockton to incorporate only those qualifying activities into the deduction. DRA multiplies the deduction calculated by CWS by the percentage of water produced[26] in the district (a qualifying activity).

2) GENERAL INCOME TAX CALCULATIONS

In calculating income taxes, both DRA and CWS subtract common expenses from estimated revenue. For the calculation of state taxes, CWS has calculated tax depreciation amounts to reflect the required flow-through of deferred tax benefits, while federal tax depreciation amounts reflect the requirements of normalization.

[25] D.09-05-019: Base Year 2009 Cost of Capital for the three large multi-district Class A Water Utilities

[26] "produced water" and "purchased water" are the two categories of "total water" used to calculated DPAD

This methodology is consistent with the requirements of the Economic Recovery Act of 1981, the Tax Equity and Fiscal Responsibility Act of 1982, and the Tax Reform Act of 1986.

D. CONCLUSION

DRA recommends Commission adoption of DRA's estimates of Income Taxes that have been calculated and presented in Tables 6-1 and 6-2.

TABLE 6-1

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2011

(PRESENT RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	29,886.8	29,818.0	(68.8)	-0.2%
Deductions:				
O & M expenses	12,839.5	14,726.1	1,886.6	14.7%
A & G expenses	3,101.1	3,437.3	336.2	10.8%
G. O. Prorated expenses	3,982.3	5,366.9	1,384.6	34.8%
Exclude GO Book Depreciation	(531.1)	(617.2)	(86.1)	16.2%
Taxes not on Income	1,048.0	1,258.3	210.3	20.1%
Transportation Deprec Adj	(97.5)	(104.3)	(6.8)	7.0%
Interest	1,705.6	2,150.0	444.4	26.1%
Income before taxes	7,838.9	3,600.9	(4,238.0)	-54.1%
~~Calif. Corp. Franchise Tax~~				
State Tax Deductions	(4,039.2)	(4,643.8)	-604.6	15.0%
Taxable income for CCFT	3,799.7	(1,042.9)	(4,842.6)	-127.4%
CCFT Rate	8.84%	8.84%		
Additional Tax per D.84-05-036	0.0	(0.6)	(0.6)	0.0%
CCFT	335.9	(92.8)	(428.7)	-127.6%
~~Federal Income Tax~~				
Tax Depreciation	2,926.2	3,364.2	438.0	15.0%
State Corp Franch Tax	335.9	176.3	(159.6)	-47.5%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	4,576.8	60.4	(4,516.4)	-98.7%
Domestic Prod. Activities Ded.	(131.9)	(5.4)	126.5	-95.9%
Adjusted Taxable Income	4,445.0	55.0	(4,389.9)	-98.8%
FIT Rate	35.00%	35.00%		
FIT	1,555.7	19.3	(1,536.5)	-98.8%
Investment Tax Credit	6.7	6.7	0.0	0.0%
Total FIT	1,549.0	12.6	(1,536.5)	-99.2%
Total FIT & CCFT	1,884.9	(80.3)	(1,965.3)	-104.3%

TABLE 6-2

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

TAXES BASED ON INCOME

TEST YEAR 2011

(AT CWS PROPOSED RATES)

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Operating revenues	36,683.9	36,615.5	(68.4)	-0.2%
Deductions:				
O & M expenses	12,926.1	14,812.8	1,886.6	14.6%
A & G expenses	3,101.1	3,437.3	336.2	10.8%
G. O. Prorated expenses	3,982.3	5,366.9	1,384.6	34.8%
Exclude GO Book Depreciation	(531.1)	(617.2)	(86.1)	16.2%
Taxes not on Income	1,081.7	1,292.4	210.7	19.5%
Transportation Deprec Adj	(97.5)	(104.3)	(6.8)	7.0%
Interest	1,705.6	2,150.0	444.4	26.1%
Income before taxes	14,515.7	10,277.7	(4,238.0)	-29.2%
Calif. Corp. Franchise Tax				
State Tax Deductions	(4,039.2)	(4,643.8)	-604.6	15.0%
Taxable income for CCFT	10,476.5	5,633.9	(4,842.6)	-46.2%
CCFT Rate	8.84%	8.84%		
Additonal Tax per D.84-05-036	0.0	(0.6)	(0.6)	0.0%
CCFT	926.1	497.4	(428.7)	-46.3%
Federal Income Tax				
Tax Depreciation	2,926.2	3,364.2	438.0	15.0%
State Corp Franch Tax	926.1	432.9	-493.2	-53.3%
Pref Stock Dividend Credit	0.0	0.0	0.0	0.0%
Taxable income for FIT	10,663.3	6,480.6	(4,182.8)	-39.2%
Domestic Prod. Activities Ded.	(307.2)	(583.3)	-276.1	89.9%
Adjusted Taxable Income	10,356.1	5,897.3	-4458.9	-43.1%
FIT Rate	35.00%	35.00%		
FIT	3,624.7	2,064.0	(1,560.6)	-43.1%
Investment Tax Credit	6.7	0.0	(6.7)	-100.0%
Total FIT	3,618.0	2,064.0	(1,553.9)	-42.9%
Total FIT & CCFT	4,544.1	2,561.5	(1,982.6)	-43.6%

CHAPTER 7: UTILITY PLANT IN SERVICE

A. INTRODUCTION

Tables 7-1 and 7-2 at the end of this Chapter show DRA and CWS' estimates for the Stockton District Plant in Service for Test Year 2011 and Escalation Year 2012.

DRA reviewed and analyzed CWS' testimony, application, Minimum Data Requirements, workpapers, capital project details, estimating methods, Urban Water Management Plan ("UWMP"), Water Supply & Facilities Master Plan ("WS&FMP"), and responses to various DRA data requests. DRA also conducted a field investigation of most of the proposed specific plant additions before making its own independent estimates including adjustments where appropriate. Important and significant differences between DRA's and CWS' estimates of specific plant additions are attributed to the items listed in Table 7-B.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends that: 1) plant additions for twelve specific projects in 2009 be disallowed, adjusted, or continue with existing advice letter treatment; 2) plant additions for thirteen specific projects in 2010 be disallowed, adjusted, or continue with existing advice letter treatment; 3) plant additions for eight specific projects in 2011 be disallowed or adjusted; 4) plant additions for nine specific projects in 2012 be disallowed; 5) plant additions for CWS' main, service & hydrant replacement programs be adjusted to reflect DRA's estimates; 6) plant additions for carryover projects be adjusted to reflect DRA's estimates; and 7) plant additions for non-specifics in 2009 through 2012 be adjusted to reflect DRA's escalation factors. Based on these recommendations, DRA's estimates for the 2009, 2010, 2011, and 2012 plant additions are $6,620,600, $2,111,900, $2,445,900, $1,987,400, respectively versus CWS' proposed amounts of $15,919,600, $7,080,200, $7,476,200, $9,599,100, respectively for the same years.

Table 7-A. Stockton District

Company funded Plant Additions,
Including Carryovers and Non-Specifics
(Thousands of Dollars)

	2009	2010	2011	2012	AVG
DRA	$6,620.6	$2,111.9	$2,445.9	$1,987.4	$3,291.5
CWS	$15,919.6	$7,080.2	$7,476.2	$9,599.1	$10,018.8

Table 7-B. Specific Project Differences Comparison

Budget Year	Project ID Number	Category	Project Description	CWS Proposed Budget	DRA Proposed Budget
2009	15583	Storage	Paint Interior & Exterior Complete - Sta. 80 Tank 1 - Res.11	$149,300	$127,400
2009	16907	Pumps	Replace Booster Pump - Sta. 65-A	$23,800	$0
2009	16921	Purification	Convert Chlorination - Sta. 59-01 & 66-01	$30,700	$0
2009	16922	Equipment	National Pollution Discharge Elimination System (NPDES) Test Equipment	$3,800	Move to Non-specifics
2009	17102	Pumps	Replace Pump & Add Energy Monitoring - Sta. 66-01	$89,500	$0
2009	17103	Pumps	Replace Pump & Add Energy Monitoring - Sta. 21-01	$94,600	$0
2009	17109	Pumps	Replace Pump & Add Energy Monitoring- Sta. 66-02	$83,000	$0
2009	17203	Wells	Drill, Develop, & Equip New Well - Including Monitoring Well	$897,400	Keep existing Advice Letter deadline & cap
2009	17736	Equipment	Toyota Tundra	$27,500	Defer to next GRC
2009	19707	Storage	Paint Interior Complete - Sta. 82 Tank 7	$324,900	$159,100
2009	20296	Land	Land - New 3.25MG Storage Tank & Booster Pump Facility	$42,200	$0

Budget Year	Project ID Number	Category	Project Description	CWS Proposed Budget	DRA Proposed Budget
2009	21074	Equipment	Ford F-150	$27,600	Defer to next GRC
2010	17203	Wells	Drill, Develop, & Equip New Well - Including Monitoring Well	$341,000	Keep existing Advice Letter deadline & cap
2010	19804	Purification	MN Treatment - Sta. 36-01	$975,700	$723,600
2010	19903	Equipment	Conference Room Media Equipment - New Customer Service Center	$18,900	Move to Non-specifics
2010	19985	Purification	Sodium Hypo Chlorite System - Sta. 75-01 & Sta. 21-01	$32,400	$0
2010	20204	Land	New Well	$325,000	$0
2010	20273	Pumps	Energy Monitoring Program	$76,000	Pilot Program in Marysville
2010	20296	Storage	3.25MG Storage Tank & Booster Pump Facility	$2,075,333	$0
2010	20296	Land	Land - New 3.25MG Storage Tank & Booster Pump Facility	$408,189	$0
2010	20472	Pumps	Replace Pump & Add Energy Monitoring - Sta. 71-01	$87,500	$0
2010	20476	Pumps	Replace Pump & Add Energy Monitoring - Sta. 76-01	$98,900	$0
2010	20673	Structures	Upgrade Security System - New Customer Service Center & New Jensen Yard	$27,000	$0
2010	20989	Structures	New Parking Area - Sta. 1	$102,600	$0
2010	21253	Pumps	Generator - Sta. 62	$163,000	$120,000
2011	17203	Pumps	Equip New Well - Including Monitoring Well	$559,370	Keep existing Advice Letter deadline & cap
2011	17404	Structures	Site Improvements - GAC & Manganese Treatment System - Sta. 78-01	$1,902,900	$1,155,600

Budget Year	Project ID Number	Category	Project Description	CWS Proposed Budget	DRA Proposed Budget
2011	19986	Purification	Sodium Hypo Chlorite System - Sta. 71-01 & Sta. 16-01	$34,600	$0
2011	20204	Wells	Drill New Well	$1,744,620	$0
2011	20273	Pumps	Energy Monitoring Program	$79,000	Pilot Program in Marysville
2011	20296	Structures	Site Improvements - 3.25MG Storage Tank & Booster Pump Facility	$629,444	$0
2011	20477	Pumps	Replace Pump & Add Energy Monitoring - Sta. 77-01	$95,200	$0
2011	20479	Pumps	Replace Pump & Add Energy Monitoring - Sta. 75-01	$94,300	$0
2012	19799	Purification	MN Treatment - Sta. 69-01	$1,024,019	$723,600
2012	19987	Purification	Sodium Hypo Chlorite System - Sta. 79-01 & Sta. 7-02	$37,800	$0
2012	20204	Pumps	Equip New Well	$1,181,685	$0
2012	20204	Structures	Pumphouse & Site Improvements - New Well	$665,907	$0
2012	20273	Pumps	Energy Monitoring Program	$81,000	Pilot Program in Marysville
2012	20296	Pumps	Pumping Equipment - 3.25MG Storage Tank & Booster Pump Facility	$719,380	$0
2012	20481	Pumps	Replace Pump & Add Energy Monitoring - Sta. 59-01	$90,000	$0
2012	20484	Pumps	Replace Pump & Add Energy Monitoring - Sta. 7-02	$98,100	$0
2012	26807	Land	New Well	$325,000	$0

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C. DISCUSSION

The Stockton District has recorded $5,891,200 per year in average gross plant additions during the past five years (2004-2008).[27] During this same period, the Commission authorized $5,847,500 per year in gross capital additions for the Stockton District that were included in rates. Major authorized projects that have contributed to the recent high level of capital additions include at least $10.5 million in 2006 for main installation and storage tanks for the arsenic blending system.[28] The district's average gross plant addition request for the period of 2009-2012 is $10,333,300 per year, which represents a 75% increase over historical recorded plant additions. On a going-forward basis, DRA recommends $3,291,500 per year in average gross plant additions during 2009-2012.

1) Carryover Projects

CWS identifies $11,444,818 in 2009 and $2,646,500 in 2010 carryover projects, respectively, in its ratebase workpapers (totaling $14.1 million). In the Results of Operation report for the Stockton District, CWS identifies $13,868,000 in carryover projects. DRA was not able to reconcile the two estimates, even after it sent a clarifying data request to CWS.

Based upon the CWS response to DRA data request MD7-008 on all carryover projects, DRA calculated its carryover estimate by subtracting advice letter projects from the carryover totals, since advice letter projects have uncertain costs and completion dates, and may not occur at all.[29] DRA estimates a carryover capital budget of $5,427,400 in 2009 for this rate case cycle.

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[27] Gross plant additions include company funded plant additions as well as contributions and advance deposits for specific plant.

[28] Appendix B to this report, CWS response to DRA data request MD7-001. Projects 9603, 9604, 9605, 9606, and 9608 were recorded at a total cost of over $10.5 million in 2006.

[29] Advice letter projects are handled separately though a rate base offset.

CWS lists carryover project 9537 with a $5,508,000 cost estimate and for arsenic treatment at Station 69. Based upon a response to a data request, CWS states that this project was cancelled since the arsenic blending facility was constructed instead and no charges were booked to the account.[30] Therefore, DRA recommends that this project should be removed from the carryover budget estimate for 2009. CWS lists carryover project 11472 to increase water supply (by constructing well 85-01) with a budget of $2 million in response to DRA's data request, MD7-008. The Commission approved this project at a total cost of $1.787 million in the 2004 GRC, two rate cases ago in Stockton.[31] DRA recommends approving the $1.787 million project cost and includes this amount in its carryover capital budget estimate.[32]

The Commission approved carryover project 16025 to construct a new customer service center ($1,215,000 cap), carryover projects 16821 ($132,085 cap) and 16834 ($178,500 cap) to modify two wells to reduce arsenic and project 17203 ($795,000 cap) to construct a new well in the last GRC with advice letter treatment and specific caps. The current deadline for submission of advice letters for these projects is the effective date of rates in the current rate case, which is scheduled to be January 1, 2011.[33] CWS seeks to move carryover 17203 for construction of a new well into rates in this GRC without following the advice letter process and with $1million in increased costs (total budget estimated by CWS is $1.8 million). DRA recommends that these projects remain as advice letter projects with the existing deadlines and specific budgetary caps. CWS has not provided any compelling evidence that these projects should be moved into

[30] Appendix B to this report, CWS response to DRA data request MD7-008, Question 8.
[31] Settlement agreement in A.04-09-028. Appendix L, p.15. http://docs.cpuc.ca.gov/published/GRAPHICS/48065.PDF
[32] DRA's analysis is discussed further in the section on new wells below.
[33] Settlement between CWS and DRA in A.07-07-001, approved in D.08-07-008.

rates at this time given CWS' slow pace with well construction. Neither has CWS provided an explanation describing why costs have increased by $1 million for project 17203 since the last GRC in order to construct a new well.

CWS lists project 16819 for a new pipeline to connect well 85-01 to the arsenic blending facility. The Commission authorized this project in the last GRC at a total cost of $880,600. According to the WS&FMP, CWS should "consider constructing a combined arsenic treatment facility at Station 85, to treat the wells included in the current blending program."[34] DRA supports the suggestion of installing a centralized arsenic treatment facility at either Station 85 or Station 69 which contains a large storage tank for holding blended water prior to distribution into the drinking water system.

Arsenic is a carcinogenic compound in water with cumulative adverse health effects in the human body. There is a public health goal ("PHG") of 4 ppt[35] (parts per trillion) in California as determined by the Office of Environmental Health Hazard Assessment and a Maximum Contaminant Level Goal ("MCLG") of zero,[36] which is the concentration at which no known or anticipated adverse health effects would occur.[37] In addition, studies have shown that carcinogenic effects of arsenic are measurable well below 1 ppb,[38] although the MCL is 10 ppb in the United States. CWS' current blending program produces effluent drinking water with about 5 ppb of arsenic. Therefore, it is in the public interest to treat carcinogenic compounds at their source instead of contaminating highly pure

[34] Stockton WS&FMP p. 9-18.
[35] http://www.oehha.org/water/phg/pdf/asfinal.pdf
[36] http://www.epa.gov/safewater/arsenic/index.html
[37] http://www.epa.gov/safewater/wsg/wsg_H14.pdf
[38] http://www.nrdc.org/water/drinking/arsenic/exesum.asp

sources of water[39] with arsenic laden water and then dispersing the risk to a larger population. The previous pipeline projects to centralize the blending facility provides the ability to treat all arsenic contaminated producing wells in one location realizing some economies of scale instead of treatment at each well head.

DRA analyzed the comparison of the arsenic treatment alternatives, and believes that CWS prematurely dismissed this option in the 2004 GRC when it decided that arsenic blending was the best course of action. DRA estimates that $2 million in capital costs and $400,000 in annual O&M costs would be needed to install a Sorb 33 ferrous oxide system for a centralized plant designed to treat all currently blended wells along with well 85-01, based upon discussions DRA held with Severn Trent, one of the potential vendors CWS listed for arsenic treatment.[40] Since this technology option was the lowest cost of all possibilities CWS listed in its Data Trending Report[41] for the Stockton District, DRA strongly suggests that CWS pursue this treatment option. Severn Trent also informed DRA that CWS' concerns about using an acid scrub to regenerate the media and reduce silica interference could be handled entirely though a service it provides on-site. Severn Trent provided the cost for media replacement in the O&M cost estimate. The acid scrub process is not required for this treatment technology,[42] but it can be used to extend the life of the media beyond 1 year.

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[39] Stockton East Water District (SEWD) sells up to 23 MGD of purchased water to CWS with an arsenic concentration of 0.27 ppb.

[40] Per email correspondence on December 28, 2009, capital costs have decreased by 10-12% since the original quote was submitted in December 2006 while O&M costs remain the same. The original estimate was $0.5 million in capital costs and $87,000 in annual O&M costs for a 1,800 gpm flow which DRA scaled to 6,600 gpm.

[41] Data Trending Report included in project 19799 justification in the Final Application.

[42] Silica interference will not prevent the iron oxide media from effectively removing arsenic, it will merely shorten its useful life.

DRA therefore recommends that carryover project 16819 be continued with approval contingent upon CWS constructing the Sorb 33 arsenic treatment system through a separate application or Tier 3 Advice Letter. DRA recommends significant cost savings in this rate case and believes that some of the savings should be redirected to promote long-term public health goals.

2) Main, Services and Hydrant Replacement Projects

CWS requests a total of $4.8 million for 2009-2012 in Company funded specific Mains, Service, and Hydrant replacement projects as shown in Table 7-C below:

Table 7-C. Requested Mains, Streets, Services and Hydrants Replacement Costs

	2009	2010	2011	2012	Totals
Mains	$1,351,500	$926,200	$703,000	$1,192,100	$4,172,800
Services	$145,300	$244,000	$132,900	$142,300	$664,500
Hydrants	$0	$0	$0	$0	$0
Non-Specific Mains, Services, Streets and Hydrants	$480,600	$490,700	$502,000	$513,000	**$1,986,300**
Total Specific	$1,496,800	$1,170,200	$835,900	$1,334,400	**$4,837,300**
Total including non-specific	$1,977,400	$1,660,900	$1,337,900	$1,847,400	**$6,823,600**

The $4.8 million in specific projects is in addition to the requested $2.0 million in non-specific mains, service, street and hydrant replacement projects, for a total of $6.8 million in mains, hydrants and service replacement projects.

CWS declined to provide historical costs for mains, services, hydrants, valves and meters to DRA, despite multiple data requests.[43] CWS' claimed justification for these projects usually include assertions of either numerous leaks

[43] Appendix B to this report, see non-responsive CWS answers to DRA data requests MD7-016, MD7-017 and NKS-005.

or fireflow improvements as justifications for replacement of these mains, services and hydrants.

a. **Fireflow:** In terms of fire flow, according to GO 103-A, "The utility shall not be responsible for modifying or replacing at its expense any existing facilities, which are otherwise adequate, in order to provide increased fire flow or duration due to changes in the standards after the initial construction."[44] CWS' replacement of pipe merely to improve fireflow cannot therefore be justified.

b. **Leaks/100 miles of main:** Further, CWS provided the following response to ALJ O'Donnell's request for an exhibit showing CWS' methodology for mains replacement, "CWS annually determines the number of leak for each district on the basis of leaks per one hundred miles of main. This information along with the actual length of targeted mains in a district is used to set the annual target main replacement length." However, when DRA asked for the leaks per one hundred miles of main for projects in this GRC, CWS was unable to provide such information.[45]

c. **Repair vs replacement:** When DRA asked CWS how it concluded a particular targeted main was beyond its "useful life", CWS responded: "In reality, one can extend the "useful life" of many facilities, but the cost to do so may outweigh the cost to replace."[46] However when DRA asked CWS if it did any analysis to show that the cost to repair was

[44] GO 103-A, VI. Fire Protection Standards, 3.Replacement of Mains A.Changes to Fire Code, p.25.
[45] Appendix B to this report, CWS response to DRA data request NKS-006, question 7.
[46] Appendix B to this report, CWS response to DRA data request NKS-002, question 11.

higher than the cost to replace for the targeted mains in this general rate case, CWS said it had not done such an analysis.[47]

DRA therefore concludes that CWS is not able to effectively prioritize its specific hydrant, main and service replacement projects based on actual conditions of the pipe and through the use of tools, such as AWWA's "Decision Support System for Distribution System Piping Renewal," which have been available since 2002.[48] DRA notes that other utilities, such as California American Water Company, routinely prepare a "Condition Based Assessment" document prepared by a licensed professional engineer to assess the condition of their transmission and distribution systems, in each district to identify and prioritize investment in transmission and distribution infrastructure.[49]

DRA therefore recommends that the Commission:

1) Disallow the specific main, hydrant and services replacement projects i.e. a total of $4.8 million.

2) Allow the adjusted[50] non-specific budget in the amount of $1.8 million for mains, service, street and hydrant projects to cover any repairs or unforeseen circumstances.

[47] Appendix B to this report, CWS response to DRA data request NKS-002, question 8.

[48] Appendix B to this report, CWS response to DRA data request NKS-002, question 12. CWS replied it had not used this or a similar tool to evaluate its mains targeted for replacement in this general rate case.

[49] For example, in A.08-01-027, Cal Am conducted a condition-based assessment of its infrastructure for its Monterey district, and prioritized its proposals in that rate case based on the condition of the infrastructure.

[50] Non-specific capital budgets have been adjusted for DRA's inflation forecast as discussed at the end of the chapter.

3) Direct CWS to develop a "condition-based assessment" prepared by a licensed professional engineer including a prioritization plan, a comparison of the cost to repair versus replacement, and an analysis of leaks/100 miles to justify its main replacement programs in future rate cases.

3) Projects 16907, 17102, 17103, 17109, 20472, 20476, 20477, 20479, 20481, 20484- Pump Replacement Program

CWS budgets $290,000 in 2009, $186,400 in 2010, $189,500 in 2011, and $188,100 in 2012 for specific capital additions for ten pump replacement projects and associated energy monitoring devices (total budget of $854,000). CWS also requests $694,900 in non-specific pump projects during 2009-2012, a total request of over $1.5 million in pump replacement projects. CWS claims that the pump replacement projects are necessary due to low efficiency pumps and motors. The following table from Standard Practice U-3-SM shows the Commission metrics for pump efficiency ranges:[51]

Table One: Pump Efficiency Ranges—Percent Wire to Water (from Case No. 10114)

Motor HP	Poor	Fair	Good	Excellent
3-5	41.9 or less	42-49.9	50-54.9	55 or above
7.5-10	44.9 or less	45-52.9	53-57.9	58 or above
15-30	47.9 or less	48-55.9	56-60.9	61 or above
40-60	52.9 or less	53.59.9	60-64.9	65 or above
75 and above	55.9 or less	56-62.9	63-68.9	69 or above

DRA discovered that in seven of the originally proposed projects, the pump's efficiency was rated either "Fair" or "Good," and in only three cases was the pump rated "Poor" in terms of operational plant efficiency ("OPE") according to established pump test standards. For five of the replacement projects, the most recent pump tests showed an OPE greater than 60%.

[51] Standard Practice U-3-SM, http://docs.cpuc.ca.gov/word_pdf/REPORT/83111.pdf.

Therefore, DRA recommends that the Commission:

1) Disallow the specific pump replacement projects and associated energy monitoring equipment, i.e. a total of $854,000

2) Allow the adjusted[52] non-specific pump replacement budget in the amount of $633,100 prioritized for projects that will produce the greatest operational cost and energy savings.

3) Direct CWS to reevaluate its pump replacement program with a targeted priority list based upon anticipated cost and energy savings due to pump replacement.

4) Project 20296– 3.25 MG Storage Tank & Booster Pump Facility

CWS proposes $3,832,300 in 2010-12 for a 3.25 MG storage tank at a yet to be determined location in the Stockton District. CWS alleges a storage deficit of 3.2 MG based upon the WS&FMP analysis. DRA strongly disagrees with this assessment. The WS&FMP performed a faulty and unsubstantiated analysis of the storage and pumping needs of the District. The WS&FMP lists three components of storage requirements as criteria for meeting storage standards. These components are operational (or equalization) storage which is assumed to be 25% of Maximum Day Demand ("MDD") in the absence of a diurnal demand curve, fire reserve storage which is assumed to be the highest fire flow for the land use in Stockton District,[53] and finally emergency storage which is assumed to be 50% of MDD (or one average day demand). The Stockton District has a total storage tank volume of 9.9 MG.

[52] Non-specific capital budgets have been adjusted for DRA's inflation forecast as discussed at the end of the chapter.

[53] The maximum fire flow for industrial/government areas is 4,500 gpm for 4 hours which

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DRA investigated all components of storage requirements claimed by the WS&FMP, and found that there is no governing standard for emergency storage in California.[54] CWS claims in its WS&FMP that the California Department of Public Health ("CDPH") recommends an emergency storage component of at least 25% of the MDD and up to a maximum of one average day demand ("ADD"). When DRA asked CWS to provide the exact citation and quote from the Drinking Water Regulations in Title 22, Chapter 16 where CDPH calls for a minimum emergency supply in each pressure zone equivalent to the average day demand, CWS was unable to do so.[55]

Instead, DRA discovered that CDPH recommends that public water systems should be able to meet 4 hours of Peak Hour Demand ("PHD")[56] with storage, source capacity and/or emergency connections in each pressure zone.[57] In the Stockton District there is only one pressure zone and the PHD is equivalent to 11.9 MG over a four hour period.[58] The Stockton East Water District ("SEWD") can provide CWS with up to 23 MGD, which is 3.8 MG over 4 hours. The groundwater production capacity from all active wells is 35.6 MGD, which is

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equates to 0.96 MG.

[54] Appendix B to this report. CWS admits that the AWWA has no standard for emergency storage in response to DRA data request MD7-007, Question 5, and MD7-012, Question 2. Similar admissions are made in many of the WS&FMP documents as well.

[55] Appendix B to this report. DRA issued data request MD7-013 on November 25, 2009 and received a response on January 27, 2010. CWS stated that the consultant who prepared the WS&FMP had used an out-dated reference that incorrectly cited pre-1994 CDPH drinking water standards.

[56] PHD is typically calculated by multiplying the MDD by a peaking factor of 1.5 according to CDPH, Drinking Water Regulations, Title 22, Chapter 16, Article 2, §64554. New and Existing Source Capacity (b)(1).

[57] CDPH, Drinking Water Regulations, Title 22, Chapter 16, Article 2, §64554. New and Existing Source Capacity (a)(1) for systems with more than 1,000 service connections.

[58] According to the WS&FMP, current PHD is 71.2 MGD. At build out this increases to 87.7 MG based upon WS&FMP projections.

5.9 MG over 4 hours. The total source capacity is 9.7 MG, and including the available 9.9 MG in storage brings the total supply available to 19.6 MG over a four hour period, leaving a surplus of 7.7 MG for fire reserve purposes. At build-out, the 4 hour PHD requirement is 14.6 MG, leaving a 5 MG surplus with existing sources of supply and storage.

The CDPH PHD standard is similar to what the WS&FMP refers to as the operational storage requirement, but the CDPH requirement allows source capacity[59] and emergency connections to count on an equal basis with storage volumes in meeting the PHD standard. The WS&FMP creates an entirely separate category of emergency storage, which has no precedent, above and beyond operational and fire reserve storage.[60]

In the event of an electrical power outage or other emergency, CWS has back-up power generators at Well 21-01, 68-01, and 79-01, with a total supply capacity of 5.5 MGD. The Stockton District has one portable emergency booster pumps rated at 140 HP, which can each replace a booster pump during a power failure. Furthermore, the Stockton District has access to 23 MGD from the SEWD which has its own independent backup power supply.[61] This is a total of 28.5 MGD (equivalent to one ADD) of emergency water supply available.

Therefore, the WS&FMP incorrectly states that there is currently a storage capacity deficit in the Stockton District. In actuality, the Stockton District has more than sufficient storage, source capacity, and emergency connections to meet

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[59] "Source capacity" means the total amount of water supply available, expressed as a flow, from all active sources permitted for use by the water system, including approved surface water, groundwater, and purchased water. CDPH, Drinking Water Regulations, Title 22, Chapter 16, Article 1, Definitions §64551.40.

[60] Fire reserve storage serves as an emergency storage in most situations.

[61] Stockton District WS&FMP, p.10-3.

all existing and build-out operational and fire reserve storage requirements. DRA recommends removing the capital costs associated with this project from 2010-2012 plant additions.

5) Project 20204 & 26807 – New Well Construction & Land

CWS budgets $3.9 million in 2010-2012 for two new wells in project 20204, and $325,000 in 2012 for the purchase of land for a third new well in project 26807. As described in the section above, the WS&FMP analysis that claims a 3.2 MG storage deficit is faulty. For the reasons described in that section, the Stockton District has more than sufficient storage, source capacity and emergency connections to meet all existing and build-out operational and fire reserve storage requirements.

In terms of adding new wells to meet pumping capacity standards, GO 103-A states that during initial construction, extension, or modification to serve a new applicant or provide a change in use, a water distribution system should be able to meet two hours of fire flow while maintaining a minimum pressure of 20 psi.[62] It would be difficult to argue that the Stockton District is being modified or extended to serve a new applicant or provide a change in use; therefore this requirement does not apply. However, the current distribution system is able to meet this standard regardless. Currently, the average day demand in the Stockton District is 28.5 MGD. In order to meet fire flow plus average day demand, a total volume of 2.9 MG over 2 hours is necessary.[63] At build-out, ADD increases to 35.1 MGD according to the WS&FMP, which would require 3.5 MG for the same two hour period. The total source capacity currently available in Stockton to meet this

[62] GO 103-A. VI. Fire Protection Standards 2. Initial Construction, Extension, or Modification, p.25.

[63] 4500 gpm x 60 minutes x 2 hours + 28.5 MGD / 12 hours = 2.9 MG.

condition is 58.6 MGD divided by 12 hours, or 4.9 MG which is more than sufficient for both existing and build-out scenarios.

The WS&FMP performed a hydraulic analysis on the Stockton water distribution system, based upon a criterion of meeting MDD while maintaining 20 psi at all service connections to determine fire flows. This is a flawed assumption, as there is no requirement to meet MDD plus fire flow for an existing water system. Only new portions of a system are required to meet this standard.[64] Therefore the Commission should discount any fire flow deficiencies alleged as a result of this analysis. The correct analysis would simulate average day demand conditions with fire flow standards for the existing system.

A second analysis examined the minimum pressures sustained while meeting PHD. The WS&FMP argues that 40 psi is the minimum standard for PHD according to GO 103-A. However, DRA verified that during hours of peak demand, GO 103-A only requires 30 psi at service connections.[65]

> "Each potable water distribution system shall be operated in a manner to assure that the minimum operating pressure at each service connection throughout the distribution system is not less than 40 psi nor more than 125 psi, **except that during periods near PHD the pressure may not be less than 30 psi** and that during periods of hourly minimum demand the pressure may be not more than 150 psi."

Since the entire Stockton District maintained a minimum pressure of at least 37 psi during the PHD model simulation (without well 70-01 or 85-01), there is no deficiency in pressure that would require constructing a new well or adding

[64] GO 103-A. II. Standards of Service. 2. Water Quality and Supply Requirements B. Quantity of Water. 3b) Potable Water System Capacity, p.11.
[65] GO 103-A. 6A. Variations in Pressure, p. 30.

new storage reservoirs. CWS' claim that another new well is needed to replace well 8-01 and 10-01 is unfounded. Well 8-01 has been inactive since the early 1980's and well 10-01 has been inactive since 1994 and other new wells have been constructed since that time. CWS should first complete carryover project 17203 for a new well, and since well 70-01 (700 gpm) is now connected to the blending system and 85-01 (1800 gpm) is planned for connection this will further increase the total groundwater supply capacity.

Therefore, more new wells are not needed to meet hydraulic restrictions, fire flow, or PHD conditions. DRA recommends removing the capital costs associated with these projects from 2010-2012 plant additions.

6) Project 2073 - Energy Monitoring Program, 2009 – 2012

CWS budgets $236,000 during 2010-2012 for power meters, flow meters and pressure recording transducers to more accurately measure the real-time energy consumption at its well and booster stations in the Stockton District. DRA supports a pilot study of the energy monitoring program in the Marysville District to properly identify the implementation costs and operational benefits of having highly accurate and fine-scaled information on the unit costs (in both dollars and kWh) of water supply. DRA believes that a pilot program in the Marysville District is appropriate after CWS informed DRA that most of the capital infrastructure was already in place in this district, thus requiring little to no capital additions. Since the operational efficiency benefits are highly uncertain, a pilot program would allow quantification before a company-wide program is launched.[66] Therefore, DRA recommends that the energy monitoring program in Stockton be disallowed and removed from capital additions for those years.

[66] In this GRC, CWS budgeted $3.7 million for the energy monitoring program on a company-wide basis.

7) Projects 17404, 19799 & 19804 – Manganese Treatment at Station 36 & 78

CWS budgets $975,700 in 2010 capital additions for project 19804 for manganese treatment at Station 36, $1,902,900 in 2011 capital additions for project 17404 for organics and manganese treatment at Station 78, and $1,024,019 in 2012 capital additions for project 19799 for manganese treatment at Station 69. DRA requested information on manganese and trichloroethene ("TCE") concentrations over time at these well stations. Based upon its review of water quality data, DRA believes these projects are necessary and prudent. DRA disagrees with the cost estimates however.

Project 19804 for manganese treatment at Station 36 and project 17404 for manganese and TCE treatment at Station 78 reference the recently completed manganese treatment system at Station 76 in the Stockton District. DRA examined the contractor bid for the Station 76 project, which totaled $670,000 for all design, furnishing and installation of the treatment system.[67] The only difference between the manganese treatment projects is the flow rate capacity of the wells at Station 76 (1100 gpm), Station 78 (1300 gpm) and Station 36 (900 gpm). The proposed projects at Station 78 and 36 have a combined flow rate of 2200 gpm, which is exactly twice the reference project flow rate. Thus, on average, each project will have the same manganese related costs as the reference bid. By applying the standard 8% overhead rate to the $670,000 project DRA arrived at total estimate of $723,600 for project 19804. DRA recommends approving project 19804 at an adjusted cost of $723,600.

Project 17404 also includes TCE treatment at Station 78. DRA examined the reference contractor bid for the GAC filters to treat TCE which totaled

[67] This bid includes all design, purchase and installation of the following: filter vessel and media, backwash tank, electrical instumentation, concrete foundation, yard piping, and chemical feed
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$400,000 in a 2008 Stockton project. By applying the company-wide standard 8% overhead rate to the $400,000 project DRA arrives at its estimate of $432,600. Therefore, DRA recommends approving project 17404 at an adjusted cost of $1,155,600.

Project 19799 for manganese treatment at Station 69 also references the recently completed manganese treatment system at Station 76 in the Stockton District. The only difference between the manganese treatment projects is the flow rate capacity of the wells at Station 76 (1100 gpm) and Station 69 (1000 gpm), which should lower the filter vessel and media cost by about 10%. DRA was not able to estimate this cost reduction, so it included this overestimate of costs to account for any price escalation that occurs when this 2012 project goes out to bid. By applying the standard 8% overhead rate to the $670,000 project, DRA arrives at total estimate of $723,600 for project 19799. DRA recommends approving project 19799 at an adjusted cost of $723,600.

8) Projects 16921, 19985, 19986, 19987 – Convert to Liquid Sodium Chlorination

CWS budgets $135,500 in capital additions during 2009-2012 to convert eight well stations from using the tablet based calcium hypochlorite disinfection system to liquid sodium hypochlorite based disinfection. CWS states that this conversion is needed to improve reliability of chlorine dosing and to eliminate the labor necessary to periodically refill the dosing device with tablets. Based upon discussions with various district staff, DRA notes that many districts, including Dixon, use the calcium tablets without any significant problems regarding

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system, as well as site grading, surveying, startup, commissioning and training.

dissolution of tablets or clogging of the feed system as the Stockton WS&FMP alleges is occurring.[68]

More critically, DRA also learned that the liquid sodium chlorine disinfection system will not operate during a power outage, whereas the calcium tablets will continue to function. Since none of the Stations that CWS proposes installing the liquid sodium chlorination have a backup generator to provide electrical power in the event of a power failure, this could cause a significant drop in chlorine residual if these stations are converted and electrical power is lost for any length of time. Therefore, in order to protect public health concerns, DRA recommends that these stations continue to use the less vulnerable calcium tablet system until an emergency source of electrical power is installed. DRA recommends removing the costs associated with these projects from the 2009-2012 capital additions.

9) Vehicle Replacement, 2009 – 2012

CWS proposes replacing sixteeen vehicles over the 2009-2012 rate case cycle in the Stockton District.[69] DRA examined all the vehicle replacement projects and determined that only two of the sixteen fail to conform to the current Department of General Servies ("DGS") replacement criteria. DRA does not recommend approving project 17736 to replace a 2001 Toyota Tundra or project 21074 to replace a 2002 Ford F-150 and instead recommends deferral to the next rate case when DRA estimates the vehicles will exceed 120,000 miles.

DRA notes that the Commission has previously ruled that the most recent DGS criteria are the appropriate standards for vehicle replacement in rate cases

[68] Stockton WS&FMP, p.9-13.

[69] Appendix B to this report, CWS response to DRA data request MD7-011, Question 1.

involving both CWS and Southern California Water Company.[70] DRA discovered that DGS no longer uses an age based criteria (formerly 8 years) and now relies upon mileage as the sole metric to determine replacement.[71] DGS states that, "The decision whether to retain, reutilize, or dispose of any vehicle not meeting the minimum replacement criteria shall be based on an inspection taking into account the following factors:

- Current mechanical condition.
- Previous maintenance and repair record.
- Extent of needed repairs and availability of parts and life expectancy of vehicle after repair.
- Current sale value.
- Cost and availability of replacement unit and accessories.
- Owning agency's ability to replace unit.

Since CWS did not submit a report to describe why an exception to the DGS criteria should be made to any of its vehicle replacements in Stockton, DRA recommends approving fourteen vehicle projects at a total cost of $430,900 while disallowing two projects at an estimated cost of $55,100 in 2009 capital additions.

10) Projects 15583 & 19707– Tank Painting

CWS proposes $149,300 in 2009 capital additions for project 15583 to paint the interior of Tank 1 at Station 80 and $324,900 in 2009 capital additions for project 19707 to paint the interior of Tank 7 at Station 82. During its field visit, CWS informed DRA that it recently completed the tank painting for these

[70] D.06-01-025 for Southern California Water Company, and D.07-12-055 for CWS.
[71] DGS Fleet Handbook, April 22, 2008. http://www.documents.dgs.ca.gov/ofa/handbook.pdf.

two tanks. DRA agreed that the repainting was necessary and prudent. DRA disagrees on the cost estimates however.

For recently completed project 15583, DRA requested the final work order for account charges due to the project.[72] The completed work order shows a total of $127,400 in total costs, including all labor and overhead costs. Therefore, DRA recommends that this project be approved at an adjusted cost of $127,400 in 2009 capital additions.

For recently completed project 19707, DRA requested the final work order for account charges due to the project.[73] The completed work order shows a total of $159,100 in total costs, including all labor and overhead costs. Therefore, DRA recommends that this project be approved at an adjusted cost of $159,100 in 2009 capital additions.

11) Project 21253 – New Generator at Station 62

CWS proposes $163,200 in 2010 capital additions to add a 125 kW emergency generator at Station 62, which houses a non-operational backup gear head gasoline engine. DRA agrees with the need to provide a more reliable source of emergency power to the well station, but disagrees with the CWS' cost estimate. In its project justification, CWS references a purchase order for a 125 kW emergency generator for $50,000. Since the well at Station 62 currently operates with a 100 HP (75 kW) motor, CWS has overestimated the design capacity of the generator it needs by 67%. DRA based its budgetary estimate on project 14677 in Stockton completed in 2006 for a new generator at a total cost of $111,000. Scaling for four years of inflation, DRA arrives at an estimated cost of

[72] Appendix B to this report, CWS response to DRA data request MD7-008, Question 14.
[73] Appendix B to this report, CWS response to DRA data request MD7-008, Question 15.

$120,000. Therefore, DRA recommends approving this project at an adjusted cost of $120,000 for 2010 capital additions.

12) Project 20673, 20989, 19903 – New Parking, Security & Computer Equipment, 2010

CWS proposes $27,000 in 2010 capital additions for project 20673 to upgrade the security system at the new customer service center, $102,600 in 2010 capital additions for project 20989 for a new parking area at Station 1, and $18,900 in 2010 capital additions for project 19903 to purchase conference room media equipment.

CWS states that project 20673 is meant to, "provide the best guard for the customer service/operation center and Jensen Yard" with no further elaboration. DRA disagrees that a proposal to hire a security guard should be considered a capital addition. Although the cost for private security may or may not be warranted, it is clearly an expensed labor contract and not a capital addition.

Regarding project 20989, CWS states that it is "necessary to convert existing property at 1623 E. Sonora St. into additional parking/storage to accommodate New Customer Service Center parking and safer flow of traffic through both Operation and Customer Service Center lots." DRA does not agree with the need for this project. During its site visit there appeared to be ample unused space for customer parking in the existing lot behind the field office. CWS also provided no justification for the cost estimate other than to say it was based on a contractor's estimate which was not included. Therefore, DRA cannot evaluate the reasonableness of the costs, and recommends disallowing this project.

Regarding project 19903, CWS states that it is "equipment to include a VCR/DVD player, multi-media projector, sound cabinet, programming, and laptop computer for presentations." DRA does not agree with the need for this project. During its site visit DRA observed multiple presentations with quite competent

media projectors and associated equipment. DRA does not seek to micro-manage utilities expenditures and cannot examine the reasonableness of every purchase decision. Thus, DRA recommends moving these minor expenditures into CWS' estimated non-specific budget as adjusted by DRA in the section below. DRA recommends removing project 19903 from 2010 capital additions.

13) Non-specific Capital Budgets, 2009 to 2012

CWS proposes $927,800, $947,600, $969,400, $990,700, respectively in plant additions for non-specifics in the four years from 2009 to 2012. CWS non-specific estimates are based on a 10-year average with a 2% yearly escalation factor. DRA agrees with using the 10-year average, but uses escalation factors for 2009 through 2012 from the May 2009 Energy Cost of Service Branch escalation factors memo. These factors are: 2009 = (5.5)%; 2010 = (0.1)%; 2011 = 2.0%; 2012 = 2.7%. Using these escalation factors the non-specific estimates are $859,700, $858,800, $876,000, $899,700 for 2009, 2010, 2011, and 2012 respectively.

D. CONCLUSION

DRA's recommendations have been incorporated in the calculations for DRA's recommended Plant in Service as shown in Table 7-1 and Table 7-2.

TABLE 7-1

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

PLANT IN SERVICE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Plant in Service - BOY	102,766.3	117,322.4	14,556.1	14.2%
Additions				
Gross Additions	2,760.4	7,790.7	5,030.3	182.2%
Capitalized Interest	62.6	172.3	109.7	175.2%
Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
Retirements	(397.0)	(397.0)	0.0	0.0%
Net Additions	2,426.0	7,566.0	5,140.0	211.9%
Adjustments				
Gen. Plant allocated to contracts	(58.5)	(99.3)	(40.8)	69.7%
Historic Capitalized Interest	(101.2)	(101.2)	0.0	0.0%
Plant in Service - EOY	105,192.3	124,888.3	19,696.0	18.7%
Weighting Factor	17.6%	17.6%		
Wtd. Avg. Plant in Service	103,034.2	118,455.5	15,421.3	15.0%

TABLE 7-2

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

PLANT IN SERVICE

ESCALATION YEAR 2012

	Item	DRA	CWS	CWS exceeds DRA Amount	%
		(Thousands of $)			
	Plant in Service - BOY	105,192.3	124,888.3	19,696.0	18.7%
	Additions				
	Gross Additions	2,301.9	9,913.6	7,611.7	330.7%
	Capitalized Interest	53.1	226.3	173.2	326.2%
	Cap. Int. Plant Equiv CWIP	0.0	0.0	0.0	0.0%
	Retirements	(352.5)	(352.5)	0.0	0.0%
	Net Additions	2,002.5	9,787.4	7784.9	388.8%
	Adjustments				
	Gen. Plant allocated to contractors	(59.7)	(107.9)	-48.2	80.7%
	Historic Capitalized Interest	(96.2)	(96.2)	0.0	0.0%
	Plant in Service - EOY	107,194.8	134,675.7	27,480.9	25.6%
	Weighting Factor	17.6%	17.6%		
1	Wtd. Avg. Plant in Service	105,389.4	126,409.5	21,020.1	19.9%

CHAPTER 8: DEPRECIATION RESERVE AND DEPRECIATION EXPENSE

A. INTRODUCTION

This chapter presents DRA's analyses and recommendation on Depreciation for CWS' Stockton District. Tables 8-1 and 8-2 show weighted average accumulated depreciation and amortization for Test Year 2011 and Escalation Year 2012.

B. SUMMARY OF RECOMMENDATIONS

Differences in DRA's and CWS' estimates are the result of different plant additions for the test year and the escalation year. These differences are discussed in Chapter 7, Plant in Service.

C. DISCUSSION

CWS depreciation rates for components listed in the CPUC Uniform System of Accounts for Water Utilities are based on a "Depreciation Study as of December 31, 2006" prepared by AUS Consultants dated June 21, 2007. If the depreciation rates proposed in the study are used, instead of the depreciation rates adopted in D.06-08-011, the overall composite depreciation rate for the Stockton District increases by 0.16% (from 2.80% to 2.96%) and 0.17% (from 2.82% to 2.99%) in Test Year 2011 and Escalation Year 2012, respectively.

DRA accepts the depreciation rates for accounts as provided by CWS, but recommends that DRA perform an audit of CWS' submitted Depreciation Study in the next General Rate Case. The Depreciation Study should use a 0% salvage value for small mains (<6" in diameter). This recommendation is consistent with

the procedure that CWS uses to replace these small mains, abandoning the old main in place, when it is replaced.[74]

Based on the annual depreciation rates for accounts as provided in CWS' Depreciation Study the CWS estimates of implicit composite depreciation rates are 2.96% for Test Year 2011 and 2.99% for Escalation Year 2012. The DRA estimates of implicit composite depreciation rates are 3.04% for Test Year 2011 and 3.04% for Escalation Year 2012.[75] Differences between CWS and DRA estimates for composite depreciation rate are due to differences in Plant-in-Service estimates and subsequent differences in Beginning of Year Gross Depreciable Plant, and Depreciation Annual Accrual. Differences in Plant-in-Service estimates are discussed in Chapter 7.

D. CONCLUSION

DRA reviewed and accepts the methodologies outlined in CWS' Depreciation Study. DRA recommends an audit of CWS' Depreciation Study in the next GRC.

DRA recommends that the Commission adopt DRA's adjusted numbers for depreciation.

[74] For examples, as shown in Tab 55 of the 2009 Bakersfield District Project Justifications, the estimated cost of abandonment of 4" main is $0, this is also attached as Tab L in Appendix B to this report.

[75] Composite Depreciation Rates can be found in Workpaper 9-B2.

TABLE 8-1

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

DEPRECIATION RESERVE & EXPENSE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Depreciation Reserve - BOY	37,281.8	37,609.3	327.5	0.9%
Accruals				
Transportation Equipment	73.0	76.5	3.5	4.8%
Contributed Plant	208.0	204.7	(3.3)	-1.6%
Allocated non-reg contracts	2.3	3.0	0.7	30.4%
Other Plant in Service	2,816.8	3,154.9	338.1	12.0%
Total Accruals	3,100.1	3,439.1	339.0	10.9%
Retirements	(427.0)	(427.0)	0.0	0.0%
Depreciation Reserve - EOY	39,746.9	40,416.7	669.8	1.7%
Weighting Factor	50%	50%		
Wtd. Avg. Depr. Reserve	38,514.4	39,013.0	498.6	1.3%

TABLE 8-2

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

DEPRECIATION RESERVE & EXPENSE

ESCALATION YEAR 2012

	Item	DRA	CWS	CWS exceeds DRA Amount	%
		(Thousands of $)			
	Depreciation Reserve - BOY	39,746.9	40,416.7	669.8	1.7%
	Accruals				
	Transportation Equipment	77.4	80.9	3.5	4.5%
	Contributed Plant	214.8	213.5	(1.3)	-0.6%
	Allocated non-reg contracts	2.4	3.3	0.9	37.5%
	Other Plant in Service	2,878.0	3,383.6	505.6	17.6%
	Total Accruals	3,172.6	3,681.3	508.7	16.0%
	Retirements	(391.4)	(391.4)	0.0	0.0%
	Depreciation Reserve - EOY	42,528.1	43,706.6	1,178.5	2.8%
	Weighting Factor	50%	50%		
1	Wtd. Avg. Depr. Reserve	41,030.1	41,954.9	924.8	2.3%

CHAPTER 9: RATEBASE

A. INTRODUCTION

DRA and CWS' estimates for Rate Base for Test Year 2011 and Escalation Year 2012 are discussed in this Chapter.

B. SUMMARY OF RECOMMENDATIONS

DRA recommends adoption of its estimates for: Plant in Service, Depreciation Reserve, and Rate Base.

C. DISCUSSION

Tables 9-1 & 9-2 show DRA's and CWS' estimates of Rate Base for Test Year 2011 and Escalation Year 2012. The significant differences between the Rate Base developed by DRA and CWS are due to the differences in the estimates for Weighted Average Plant in Service, Depreciation, Working Cash, and General Office Allocation.

D. NET-TO-GROSS MULTIPLIER

The net-to-gross multiplier represents the change in gross revenue required to produce a unit change in net revenue. Both DRA and CWS have calculated three multipliers which reflect: 1) the increase required under 100% equity-financing where State and Federal taxes are incurred; 2) the increase required under 100% debt financing where taxes are not incurred (identical to the increase necessary to offset expenses); and 3) the increase required for additions to ratebase, which incorporates the capital structure and financing costs of the utility.[76]

[76] As adopted in Commission Decision 09-05-019

DRA and CWS use similar methodologies in calculating the net-to-gross multipliers. Calculations are shown in Table 9-3 and results are presented below. In the calculations, DRA included the business license fees which had been omitted by CWS. Also, DRA's adjustment to the Domestic Production Activities Deduction (*see Chapter 5*) results in higher numbers than those calculated by CWS.

California Water Service Company
STOCKTON
Net to Gross Multiplier

	CWS	DRA
100% Equity	**1.63107**	**1.69181**
100% Debt (expense)	**1.01785**	**1.01802**
Ratebase Additions	**1.34519**	**1.37769**

TABLE 9-1

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

TEST YEAR 2011

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Wtd.Avg. Plant in Serv.	103,034.2	118,455.5	15,421.3	15.0%
Materials & Supplies	378.6	378.6	0.0	0.0%
Working Cash - Lead-Lag	495.7	1,405.5	909.8	183.5%
Amt withheld from Employees	(10.1)	(10.1)	0.0	0.0%
Wtd. Avg. Depr. Res.	(38,514.4)	(39,013.0)	(498.6)	1.3%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	4,525.7	4,525.7	0.0	0.0%
Contributions	4,176.1	4,172.6	(3.5)	-0.1%
Reserved Amort.Intangibles	87.0	87.0	0.0	0.0%
Deferred Taxes	6,574.4	6,574.4	0.0	0.0%
Unamortized ITC	121.2	121.2	0.0	0.0%
General Office Alloc	3,267.3	3,267.3	0.0	0.0%
Taxes on - Advances	590.7	590.7	0.0	0.0%
Taxes on - CIAC	217.4	217.4	0.0	0.0%
Average Rate Base	53,975.1	69,811.0	15,835.9	29.3%
Interest Calculation:				
Avg Rate Base	53,975.1	68,037.0	14,061.9	26.1%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0%
Interest Expense	1,705.6	2,150.0	444.4	26.1%
less Cap. Interest	0.0	0.0	0.0	0.0%
Net Interest Expense	1,705.6	2,150.0	444.4	26.1%

TABLE 9-2

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

WEIGHTED AVERAGE DEPRECIATED RATE BASE

ESCALATION YEAR 2012

Item	DRA	CWS	CWS exceeds DRA Amount	%
	(Thousands of $)			
Wtd.Avg. Plant in Service	105,389.4	126,409.5	21,020.1	19.9%
Material & Supplies	378.6	378.6	0.0	0.0%
Working Cash - Lead-Lag	412.9	1,579.1	1166.2	282.4%
Amt withheld from Employees	(10.1)	(10.1)	0.0	0.0%
Wtd. Avg. Depr. Reserve	(41,030.1)	(41,954.9)	(924.8)	2.3%
Interest Bearing CWIP	0.0	0.0	0.0	0.0%
Advances	4,370.2	4,370.2	0.0	0.0%
Contributions	4,190.9	4,189.6	(1.3)	0.0%
Reserved Amort.Intangibles	156.5	156.5	0.0	0.0%
Deferred Taxes	6,799.6	6,799.6	0.0	0.0%
Unamortized ITC	114.4	114.4	0.0	0.0%
General Office Alloc	3,170.0	3,170.0	0.0	0.0%
Taxes on - Advances	306.0	306.0	0.0	0.0%
Taxes on - CIAC	211.8	211.8	0.0	0.0%
Average Rate Base	53,196.9	74,459.7	21,262.8	40.0%
Interest Calculation:				
Avg Rate Base	53,196.9	72,512.1	19,315.2	36.3%
x Weighted Cost of Debt	3.16%	3.16%	0.0%	0.0%
Interest Expense	1,681.0	2,291.4	610.4	36.3%
less Cap. Interest	0.0	0.0	0.0	0.0%
1 Net Interest Expense	1,681.0	2,291.4	610.4	36.3%

TABLE 9-3

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

NET-TO-GROSS MULTIPLIER

TEST YEAR 2011
AND ESCALATION YEAR 2012

Item	DRA	CWS
1) Uncollectibles %	1.27450%	1.27450%
2) 1-Uncoll (100%-line 1)	98.72550%	98.72550%
3) Franchise tax rate	0.48584%	0.48584%
4) Local Franchise (line 3*line 2)	0.47965%	0.47965%
5) Business license rate	0.01578%	0.00000%
6) Business license (line 5*line 2)	0.01558%	0.00000%
7) Subtotal (line 1+line 4+line 6)	1.76973%	1.75415%
8) 1-Subtotal (100%-line7)	98.23027%	98.24585%
9) CCFT (line 8 * 8.84%)	8.68356%	8.68493%
10) Domestic Production Activities Deduction *	2.57975%	8.84213%
11) FIT (line 8 minus line 9 minus line 10 * 35%)	30.43844%	28.25158%
12) Total taxes paid (ln 7+ln 9+ln 10)	40.89172%	38.69066%
13) Net after taxes (1-line 11)	59.10828%	61.30934%

Net-to-Gross Multiplier (1/line 12) = 1.69181 (DRA)
Net-to-Gross Multiplier (1/line 12) = 1.63107 (Utility)

* DRA - Line 8 minus Line 9 multiplied by 9% multiplied by percentage of Qualitied Activities
CWS - only mulitplies Line 8 by 9%.

This net-to-gross multiplier is to be used for changes in net revenue
attributable to rate of return changes only and not to be used for rate base offsets.
The net-to-gross for rate base offsets is much lower because the interest payments
1 for the debt portion of rate base increase is tax deductible.

CHAPTER 10: CUSTOMER SERVICE

A. INTRODUCTION

DRA has reviewed California Water Service Company's ("CWS'") filing, responses to DRA data requests, and data obtained from the Commission's Consumer Affairs Branch regarding customer complaints in the Stockton District.

B. SUMMARY OF RECOMMENDATIONS

DRA finds CWS' customer service record satisfactory and the customer service process reasonable.

C. DISCUSSION

1) Customer calls and complaints

The Stockton District office handled an average of 90,950 calls per year in the last 3 years. The customer service representatives ("CSR") in the district office handle all customer complaint calls. When a customer calls the district office, the CSR logs the date and time of the call along with a description of the complaint into the Customer Service Information system. The majority of customer complaints are resolved the same day they are received. Billing questions make up a large portion of the calls received by the district office. The CSR tries to resolve the billing issue directly. However, if a resolution can not be reached, the Customer Services Manager in each district is empowered to make billing adjustments as needed.

All customer complaints filed with the Commission are sent to the CWS rates department and follow a different procedure than described above. The rates department contacts the district office to inform them of the complaint with the goal of resolving the issue within 7 days. The district office researches the complaint, contacts the customer to inform them of the investigations findings and works to reach a resolution. Then the district office submits its findings and

resolution to CWS' rates department for review. CWS' rates department then contacts the Commission's Division of Water and Audits or the Consumer Affairs branch to present the complaint findings. Complaints filed by customers with the Commission since the last GRC were few in number. In general, most of the filed complaints were regarding billing, with a few concerning rates, shut-off notices, or the Low Income Program.

2) Water Quality complaints

CWS' records indicate that the number of water quality complaints have been low relative to the number of customers in the Stockton District. An effective system is in place to receive and record customer complaints concerning water quality. Customer complaints regarding taste and odor are handled by a CSR who explains to the customer why those types of conditions occur. Other types of complaints, such as low pressure or the presence of sand in the water, require a serviceman to go out to the premises and investigate the complaint. When a service call is required, the CSR notifies the maintenance department. CWS assigns personnel to investigate the problem, notify the customer, and resolve the issue. The majority of these complaints are resolved by inspecting the premises. CWS tracks all water quality complaints in their system and records them on a monthly summary report.

Table 10-A shows water quality customer complaint data for the last three years. There are six categories for the different kinds of water quality complaints. These categories are defined as:

- Air - can be trapped in water causing a milky appearance which goes away when allowed to stand and the air goes to the surface;
- Dirty - can be discolored water or sand in the water from mainline flushing or a main break in the area;

- Noise - can be associated with the water system, such as wells turning on, or the customer's internal plumbing;
- Pressure - can be too high or too low; and
- Taste or odor - can be stronger than usual from chlorine, or a musty odor the customer is not accustomed to.

Table 10-A

Stockton District Customer Water Quality Complaints

Type	2006	2007	2008
Air	3	7	12
Dirty water	68	59	54
Noise	1	3	1
Pressure	85	99	84
Sand	4	3	2
Taste/Odor	30	30	22
Total	191	201	175
Number of Customers	41,441	41,436	41,127
Total as % of Customers	0.5%	0.5%	0.4%

There were 181 Customer complaints regarding dirty water over the past three years, and 82 complaints for taste and odor. CWS explains that the primary reason for these complaints is due to high iron and manganese levels in the groundwater supply. When chlorine is added, these elements are oxidized and form yellow and black precipitates. Iron and manganese that precipitate out of solution tends to stain plumbing fixtures and discolor laundry, which is generally undesirable. CWS states that the Stockton District does use a sequestering agent to help keep these constituents in the solution. However, this is not the optimal way to remedy this situation.

The sequestering process is a manual process and does not always produce uniform results. To improve the situation, CWS has installed an iron and manganese treatment plant at one location and is blending groundwater with purchased water to reduce the iron and manganese concentrations. Also, a new

iron and manganese treatment plant is now in operation, and additional treatment needs have been identified and budgeted for the future.

In the past three-year period there has been 82 pressure complaints. These pressure complaints are generally associated with emergency system repairs, or a customer's own plumbing problems. Some complaints have occurred during high system demand times. CWS has made system improvements to improve low pressure during high system demand by installing new water mains with larger capacity, implementing a blending project, installing new booster stations, and utilizing the SCADA system to improve proper operation of the system.

D. CONCLUSION

DRA recommends the Commission find CWS' customer service to be satisfactory.

CHAPTER 11: RATE DESIGN

A. INTRODUCTION

In this GRC application (09-07-001), CWS requested changes to the non-residential rate design in Special Request #6, and requested changes to the residential rate design in Special Request #11. Thus, the scope of this chapter is limited to recommendations regarding:

1) The Water Revenue Adjustment Mechanism and Modified Cost Balancing Accounts ("WRAM/MCBA"),[77]
2) Impacts of the conservation rate designs to date
3) Impacts on Low Income customer disconnections, and
4) Low income rate assistance surcharges

B. SUMMARY OF RECOMMENDATIONS

1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the Full Burden of the Economic Downturn

DRA recommends that the Commission require CWS to modify the WRAM/MCBA so that it does not disproportionately disadvantage ratepayers compared to shareholders. The WRAM should no longer require ratepayers to pay the full difference between the authorized quantity revenue and actual quantity revenue. The Commission should modify the WRAM/MCBA so that if there are reductions in consumption, ratepayers and shareholders should split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected when conservation rates are implemented.

1) b. WRAM/MCBA surcredits should be a flat amount applied to the service charge

When there is a combined over-collection in the WRAM/MCBA, the over-collection should be passed on to ratepayers through a flat surcredit on the service

[77] Other than recommendations regarding WRAM/MCBA in DRA's special request chapters.

charge. This change to the surcredit mechanism will ensure that water-conserving customers who use less water do not receive less surcredit than customers who use large quantities of water. This will enhance the conservation price signal.

2) Not Yet Enough Data to Determine Impacts of Conservation Rate Designs

This GRC application from CWS contains six months of consumption data after CWS implemented the rate design and WRAM/MCBA mechanism Trial Programs. Six months of consumption data is not long enough to draw conclusions about the impacts of the conservation rate designs. The Commission should evaluate the impacts of the conservation rate designs in CWS' next GRC.

3) The Commission should require CWS to monitor disconnections by month and communicate payment options to customers

The Commission should require CWS to continue to track the number of residential and LIRA customer disconnections per month. If the number of disconnections has increased, CWS should develop a low-cost customer communication plan to reduce the number of disconnections. In particular, CWS should place messaging in customers' bills and on its website explaining to customers the options that are available to them if they cannot pay their bills.

4) The Commission should authorize CWS to increase the surcharge for the low-income rate assistance program as necessary to continue to provide the benefit to qualifying customers

CWS states that it proposed to increase the surcharge to fund the low-income rate assistance ("LIRA") program.[78] DRA supports an increase in the surcharge to support the forecasted participation levels in the LIRA program.

C. DISCUSSION

1) a. WRAM/MCBA Should Ensure Ratepayers Do Not Bear the Full Burden of the Economic Downturn

When the Commission adopted the WRAM/MCBA decoupling mechanism for CWS, the concept of the mechanism was to ensure a proportional impact on the utility and ratepayers when CWS implemented conservation rates. DRA's settlement with CWS, adopted in D.08-02-036 states:

> "Parties agree that the desired outcome and purpose of using WRAMs and MCBAs is to ensure that the utility and ratepayers are proportionally affected when conservation rates are implemented.
>
> a. In the context of this agreement, a proportional impact means that, if consumption is over or under the forecasted level, the effect on either the utility or ratepayers (as a whole) should reflect that the costs or savings resulting from changes in consumption will be accounted for in a way such that neither the utility or ratepayers are harmed, or benefit, at the expense of the other party."[79]

Since it is too early to evaluate quantitative usage data on the impacts of the conservation rate designs,[80] it is difficult to determine how much sales have

[78] Report on the Results of Operation, July 1, 2009.

[79] Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

[80] At the time CWS filed this GRC, there were only six months of usage data after implementation of the WRAM/MCBA and rate design Trial Programs, and CWS did not provide an analysis of this usage information to determine whether the utility and ratepayers are

(continued on next page)

decreased due to the effects of conservation oriented rates. But it is unreasonable to assume that all recorded decrease in sales was entirely due to conservation oriented rates and conservation programming, as it is certain that some portion of the decrease was due to the economic downturn and other factors. Yet, as a result of the WRAM/MCBA, ratepayers are currently bearing the full cost of the economic downturn. This issue must be addressed immediately. Therefore, until the impacts of conservation efforts can be better quantified, DRA recommends that the Commission modify the WRAM so that if there are reductions in consumption, rather than ratepayers being required to pay the full difference between the authorized quantity revenue and actual quantity revenue, ratepayers and shareholders split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected under the WRAM/MCBA decoupling mechanism, when conservation rates are implemented in accordance with the settlement.[81]

This issue should be examined in the next GRC, when over three years of consumption information will be available after the implementation of the WRAM/MCBAs and conservation rates. However, it is clear at this time that the WRAM/MCBA mechanisms have led to an unintended consequence: the WRAM shields shareholders from all financial consequences of the severe economic downturn, while ratepayers bear the full cost of the economic downturn. This is an unintended consequence of the WRAM/MCBA trial program, not one of the goals of the program.[82]

(continued from previous page)
proportionally affected when conservation rates were implemented.

[81] Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 10, section X.2. Filed June 15, 2007, adopted in Decision 08-02-036.

[82] The goals of the WRAM/MCBA mechanism trial program were three-fold:

a)"Sever the relationship between sales and revenue to remove any disincentive for the utility to implement conservation rates and conservation programs

(continued on next page)

While there is not currently a method available to apportion reductions in usage to each different cause – such as conservation and changes in economic conditions, it is clear that there are different factors that can affect water usage and each of them contribute to usage reductions. This is contrary to the WRAM/MCBA, which compensates CWS for all of the reductions in consumption, not just usage reductions from conservation. The Commission should modify the WRAM/MCBA mechanism so that it does not disproportionately disadvantage ratepayers compared to shareholders.

Further, the Commission specifically addressed the possible impact of a WRAM/MCBA for California American Water Company during an economic downturn in decision 08-06-002, p. 16, which stated:

> "One disparate impact that could occur in the Pilot Program period would be a severe economic downturn in one or more of the Los Angeles service areas that causes a significant decrease in revenues. This could occur from a high rate of home foreclosures and/or business slowdowns or shutdowns. We find this would clearly be a disparate impact as the WRAM mechanism would shield shareholders from all financial consequences of the economic downturn while requiring ratepayers to bear the full cost. Since Cal-Am will be tracking sales levels by customer class and service area, any disparate impact can be quickly seen and addressed."

CWS tracks sales levels by customer class and service area; and it is possible to calculate and graph changes in consumption in different classes and service areas. However, it is much more complex to determine or even speculate about the reasons for the changes in consumption. Especially because of the

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(continued from previous page)
b)Ensure cost savings resulting from conservation are passed on to ratepayers.

c)Reduce overall water consumption by Cal Water ratepayers." (see the Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, p. 8, section VI.1. Filed June 15, 2007, adopted in Decision 08-02-036).

significant economic downturn in recent years, that happens to coincide with implementation of increasing block rates, makes it difficult to draw conclusions about the reasons for any changing consumption patterns. Also, all CWS' districts undercollected revenue in the WRAM account during July – December 2008, except Bakersfield, King City, and Palos Verdes.[83] This is an indication that sales were lower than forecasted for almost all districts during this timeframe.

The WRAM should no longer require ratepayers to pay the full difference between the authorized quantity revenue and actual quantity revenue. The Commission should modify the WRAM/MCBA so that ratepayers and shareholders split this difference equally. This will ensure that ratepayers and shareholders are proportionally affected when conservation rates are implemented.

1) b. WRAM/MCBA Surcredits Should Be a Flat Amount Applied to the Service Charge

When there is a combined under-collection in the WRAM/MCBA, this should be recovered from ratepayers through volumetric surcharges, in accordance with Decision 08-02-036. This maintains the conservation price signals of the surcharge because customers who use more water pay a larger portion of the surcharge. However, when there is a combined over-collection in the WRAM/MCBA, this should be passed on to ratepayers through a flat surcredit on the service charge. This change to the surcredit mechanism will ensure that water-conserving customers who use less water do not receive less surcredit than customers who use large quantities of water. Furthermore, this will also enhance the conservation price signal.

This recommendation is important in light of the first six months of WRAM/MCBA and Rate Design Trial Program implementation where the over and under-collections in the net balance of the WRAM/MCBA typically were far

[83] CWS WRAM/MCBA report to the Division of Water and Audits, March 2009

greater than the 2.5%[84] trigger. In fact these balances were 10% or greater in seven districts, and were between 5% and 10% in another seven districts.[85]

2) Not Yet Enough Data to Determine Impacts of Conservation Rate Designs

DRA and CWS reached a settlement agreement on rate design and revenue decoupling on April 23, 2007, and amended the settlement on June 15, 2007. The Commission ultimately adopted the settlement on February 28, 2008 in decision 08-02-036, and CWS had 90 days after the Commission decision adopting the settlement before the Trial Program became effective. CWS implemented the Trial Program, including the WRAM/MCBAs and conservation rate designs, via Advice Letter 1855, which became effective on July 1, 2008. CWS filed this GRC application in July 2009, and included data through December 2008. Thus, this GRC contains six months of consumption data after CWS implemented the WRAM/MCBA mechanisms. Six months of consumption data is not long enough to draw conclusions about the impacts of the conservation rate designs.[86]

3) CWS should track low income disconnections on a monthly basis and provide this information in its annual report to the Commission on the WRAM/MCBA balances

Ordering Paragraph 6 from the Phase 1A Decision 08-02-036 from the conservation OII (I.07-01-022) ("OP6") requires CWS to provide data related to the implementation of the conservation rate design trial programs. Specifically, OP6 states:

> "6. Suburban, Park, and CalWater shall provide the following information in their next general rate case: monthly or bimonthly (depending upon the billing

[84] The trigger is "2.5% of the district's total recorded revenue requirement for the prior calendar year" (see Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues, Section IX 3) d., Filed June 15, 2007, adopted in Decision 08-02-036.

[85] See CWS WRAM/MCBA report to the Division of Water and Audits, March 2009.

[86] See Special Request #11 for further discussion.

cycle) … increase or decrease in disconnecting low-income program participants for nonpayment by district after adoption of conservation rate designs; increase or decrease in low-income program participation by district after adoption of conservation rate designs; increase or decrease in residential disconnections for nonpayment by district after adoption of conservation rate designs…."

In this GRC application, CWS provided some of the information required in this Ordering Paragraph.[87] In particular, CWS provided information on customer disconnections for both residential and LIRA customer groups for the firs six months of Trial Program implementation between July 1, 2008 and December 31, 2008. However, this data incorrectly "double-counted" low income customer disconnections.[88] CWS provided corrected data for July 2008 through July 2009. However, CWS did not yet provide information about customer disconnections prior to July 2008.[89] In order for the Commission to assess the "increase or decrease" in low-income disconnections when CWS implemented the conservation rate design and WRAM/MCBA Trial Programs, pursuant to the above Ordering Paragraph, data on customer disconnections from before and after the implementation of the conservation rate designs must be compared. Since CWS only provided information from after the implementation of conservation

[87] Prepared Testimony of David Morse, p. 28 – 31.

[88] Email from CWS (Tu Rash), on 1/13/2010, states regarding the query Cal Water originally ran for Dave Morse "in effect that query double counted the number of LIRA customers."

[89] DRA requested information on residential and LIRA customer disconnections from July 2007 through July 2009 in LWA-5 on 12/22/09, and CWS provided an initial response on 12/31/09, but it did not correspond to the numbers in David Morse' testimony, so CWS provided a revised response on 1/5/2010, but this still did not correspond to the numbers in David Morse' testimony. CWS provided a further revised response on 1/13/2010, but this only provided data from 2008-2009. At the time DRA had to finalize this testimony, it had not yet received final numbers for residential and LIRA customer disconnections from July 2007 through 2009, although DRA is confident CWS would have provided the information to comply with this ordering paragraph had there been unlimited time.

rate designs, this is not in compliance with OP 6. DRA believes CWS intended to provide the correct information and CWS should provide this information in its rebuttal testimony so that the Commission can consider it in this proceeding.

On a going forward basis, the Commission should require CWS to continue to track the number of residential and LIRA customer disconnections per month and report this information in the annual report that CWS submits to the Commission by March 31 each year regarding WRAM/MCBA balances.[90] If the number of disconnections has increased, CWS should develop and implement a low-cost customer communication plan to reduce the number of disconnections. In particular, CWS should place messaging on customer bills and on CWS' website explaining to customers the options that are available to them if they cannot pay their bills. For example, PG&E has a message on its website that says:

> "We Know Times Are Tough.
> If you or someone you know is having trouble paying your bill, we can help. Please call us today at 1-800-743-5000 so we can discuss program options and payment arrangements that work for you."[91]

Another example is San Diego Gas and Electric Company, which has messaging on its website that provides a rotational link to "Need Extra Help With Your Bill? Learn about available assistance" and "Get extra help with your bill."[92]

4) The Commission should authorize CWS to increase the surcharge for the low-income rate assistance program as necessary to continue the benefit for qualifying customers

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[90] Pursuant to "Amended Settlement Agreement between The Utility Reform Network, The Division of Ratepayer Advocates, and California Water Service Company on WRAM & Conservation Rate Design Issues," section IX 3), Filed June 15, 2007, adopted in Decision 08-02-036.

[91] http://www.pge.com/myhome/ (accessed 1/28/2010).

[92] http://www.sdge.com/index/ (accessed 1/28/2010).

CWS states that it proposed to increase the surcharge to fund the low-income rate assistance ("LIRA") program.[93] The Commission authorized the LIRA program in D.06-11-053, and it provides a 50% discount on the service charge to qualifying households. DRA supports the continuation of the LIRA program as authorized in D.06-11-053. To the extent that an increase in the surcharge is necessary to support the LIRA program at forecasted participation levels, the Commission should authorize the increase in the surcharge. DRA notes that this surcharge is combined with the surcharge for the Rate Support Fund ("RSF") and that CWS' requested increase from $0.009 to $0.015 per ccf[94] also includes the additional funding to support CWS' increases in the RSF subsidies. For this reason, the required increase in the surcharge to support only the LIRA program should be lower than $0.015 per ccf and should be calculated based upon the final revenue requirement in this case as well as the adopted rate of participation in the LIRA program.

D. CONCLUSION

The Commission should adopt the recommendations on rate design and revenue decoupling included in this chapter.

[93] Report on the Results of Operation, July 1, 2009, Chapter 12 "Present and Requested Tariffs" states that customers pay a surcharge of $0.009 per Ccf to fund the program and that CWS proposes to increase the surcharge to $0.015 per Ccf.

[94] Additional Prepared Testimony of Thomas Smegal, Special Request 11, p. 15, lines 21-22.

CHAPTER 12: WATER QUALITY

A. INTRODUCTION

The Rate Case Plan requires water utilities to submit information about water quality in their GRC applications. This Chapter presents DRA's review of water quality submittals by California Water Service Company ("CWS") for the Stockton District and CWS' responses to DRA's data request.

The California Department of Public Health ("CDPH") is the primary agency responsible for ensuring that the water provided to the public by the District is safe for consumption. DRA reviewed the most recent CDPH inspection report, the District's response to the report, and the CDPH's response to DRA's inquiry on the District's water quality issues and compliance status.

B. SUMMARY OF RECOMMENDATIONS

Based upon the information provided by the company and by the CDPH, CWS' Stockton District appears to be in compliance with all applicable water quality standards and requirements. Exceptions if any are noted below.

C. DISCUSSION

The Stockton District serves a population of 170,000 through approximately 45,700 service connections. It has 23 active wells and 9 standby wells, as well as 24 inactive wells. About 55% of the District's water supply is from the Stockton East Water District ("SEWD"), which supplies treated surface water from reservoirs on the Stanislaus and Calaveras Rivers. The District has significant water quality issues including arsenic, manganese and trichloroethylene ("TCE").

Arsenic – Five of the District's active wells have arsenic concentrations above the Maximum Contaminant Level ("MCL") of 10 ug/L; since May 2006,

CWS blends water from these wells with SEWD's water to meet arsenic and manganese standards.[95] A majority of the District's inactive wells also exceed arsenic MCL. CWS proposes to destroy two wells per year if the wells are not suitable for treatment.

Manganese – A total of nine active wells have elevated manganese concentrations. As mentioned above, water from five wells is blended with SEWD water to achieve compliance. The other four wells (#16, 36, 61 and 76) produce water that exceed manganese secondary MCL. CWS installed manganese removal treatment at Well 76 in 2009 and has indicated to the CDPH that it plans to install manganese treatment at the other three wells.[96] CWS designates several wells with high manganese concentrations as standby wells. According to the CDPH, as long as CWS limits the use of those wells to short-term periods consistent with the definition of standby use in CDPH regulations, CWS will not be expected to install treatment at those wells.[97]

TCE – CWS inactivated Well 78-01, which has had TCE over the MCL of 5 ug/L. CWS reports that Well 75-01 is expected to reach the MCL by approximately 2010. CWS reports that it is constructing treatment at active Well 75-01 and proposes installing treatment at currently inactive Well 78-01 to maintain adequate supply for the system.[98]

Exceedances – CWS reports that the Stockton District exceeded primary or secondary MCLs in two instances since the last general rate review.

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[95] CWS Stockton Blending Facilities Project – Operations Plan, February 2009 (for Wells 69-01, 69-02, 67-01, 62-01 and 52-01).

[96] December 1, 2009 email communications from Joseph Spano of CDPH to DRA.

[97] Ibid.

[98] Testimony of Chet Auckly (Water Quality), page 44.

(1) The District exceeded the perchlorate MCL in one sample from Well 18-01 in April 2008. No citation was issued because the well was taken offline immediately. Confirmation sample results for perchlorate were found to be at non-detect level. CWS investigated the incidence and determined that the "initial detection was valid, and it is likely that this was due to aging hypochlorite solution at the site."[99] CWS reports that it has made operational changes to prevent the reoccurrence of this problem and returned the well to service.

(2) As described earlier, four of the District's active wells exceeded manganese secondary MCL.

The CDPH issued its most recent Annual Inspection Report on January 8, 2009. The report states that the operation of the District's water system was generally satisfactory and listed deficiencies requiring corrective actions. CWS' response letter dated February 6, 2009 details how those deficiencies were addressed.

In its response to DRA's inquiry regarding the compliance status of the Stockton District, the CDPH expresses two specific concerns: (1) manganese contamination, and (2) cross-connection control program. The manganese concern is as described earlier. In regards to cross-connection control, the CDPH states that the District has lapsed in its testing of backflow prevention devices in the system and needs a cross-connection control specialist charged with bringing the system into compliance.[100]

[99] CWS' response to DRA's data request PPM-001, Item 13.b.

[100] December 1, 2009 email communications from Joseph Spano of CDPH to DRA.

D. CONCLUSION

Based on the information reviewed, it appears that CWS' Stockton District is in compliance with all applicable water quality standards and requirements and is addressing issues raised by the CDPH.

CHAPTER 13: STEP RATE INCREASE

A. FIRST ESCALATION YEAR

On or after November 1, 2011, the Commission shall authorize CWS to file a Tier 1 advice letter, with appropriate supporting workpapers, requesting the step rate increase for 2012 or to file a lesser increase in the event that the rate of return on rate base, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the 12 months ending September 30, 2011, exceeds the lesser of (a) the rate of return found reasonable by the Commission for CWS for the corresponding period in the most recent rate decision or (b) the rate of return found reasonable in this case. This filing should comply with General Order 96-B.

The Commission's Water Division ("Water Division") should review the requested step rates to determine their conformity with this order, and the requested step rates should go into effect upon the Water Division's determination of compliance. The Water Division should inform the Commission if it finds that the proposed rates do not comply with this Decision. The Commission may then modify the increase. The effective date of the revised tariff schedule should be no earlier than January 1, 2012. The revised schedules should apply to service rendered on and after their effective date. Should a rate decrease be in order, the rates should become effective on the filing date.

B. SECOND ESCALATION YEAR

For the second year, the Commission should grant an attrition adjustment for the revenue requirement increases attributable to expense increases due to inflation and rate base increases that are not offset by revenue increases. The revenue changes shall be calculated by multiplying forecasted inflation rate and operational attrition plus financial attrition times adopted rate base in 2012 times the net-to-gross multiplier.

C. ESCALATION YEARS INCREASES

The table below shows the Summaries of Earnings for Escalation Years 2012 and 2013. To obtain the increases in these years, D. 04-06-018 and D. 07-05-062 require water utilities to file an Advice Letter 45 days prior to the start of the year showing all calculations supporting their requested increases.

The revenues shown in Table 13-1 are for illustration purposes and the actual increases would be authorized only after approval of the utility's advice letter.

TABLE 13-1

SUMMARY OF EARNINGS

CALIFORNIA WATER SERVICE COMPANY
STOCKTON DISTRICT

Item	DRA 2011 (Thousands of $)	DRA 2012	% increase	
Operating revenues	30,793.6	31,302.0	1.7%	Esc. Factor
Operation & Maintenance	12,996.3	13,334.2	2.6%	1.026
Administrative & General	3,137.9	3,213.2	2.4%	1.024
G.O. Prorated Expense	4,010.6	4,114.9	2.6%	1.026
Depreciation & Amortization	2,878.0	2,952.8	2.6%	1.026
Taxes other than income	1,052.1	1,079.5	2.6%	1.026
State Corp. Franchise Tax	398.0	388.1	-2.5%	
Federal Income Tax	1,756.3	1,721.9	-2.0%	
Total operating expenses	26,229.1	26,804.5	2.2%	
Net operating revenue	4,564.4	4,497.5	-1.5%	
Rate base	53,196.9	52,418.7	-1.5%	
Return on rate base	8.58%	8.58%	0.0%	